Consumer psychology as the behavourist views it : an operant analysis of consumer channel choice

Nicholson, Michael

CONSUMER PSYCHOLOGY AS THE BEHAVIOURIST VIEWS IT:

An Operant Analysis of Consumer Channel Choice

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MICHAEL NICHOLSON

SCHOOL OF ECONOMICS, FINANCE & BUSINESS
THE UNIVERSITY OF DURHAM

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Abstract

To counter the growth in online retailing, high street retailers are increasingly adopting multichannel distribution strategies, seeking to target individual consumers by both physical and electronic means as multiple routes to purchase. In order to develop successful marketing strategies applying such a business model, however, an understanding of consumer selection between available purchase channels is clearly needed. To date, however, research in this area conducted at the individual level of analysis has been largely dominated by the cognitive paradigm, focusing upon pre-behavioural decision-making process at the expense of any meaningful investigation of actual observable acts of consumer behaviour and the environmental context within which that behaviour is situated.

Located within the emergent contextual stance in consumer research, this thesis explores the consumer channel selection process from a radical behaviourist perspective, seeking to examine the transactional nature of the relationship between the retail consumer and the environmental context within which (s)he consumes, together with the role of operant learning as the principal mechanism underpinning that person-situation interaction. Specifically, the thesis documents a process of empirical work facilitated by a leading UK apparel retailer in which the consumer use of multiple retail channels has been investigated by means of a longitudinal application of the Behavioural Perspective Model (BPM) of purchase and consumption. The results indicate that, in any given shopping situation, consumer channel choice is oriented toward maximisation of positive reinforcement and/or minimisation of aversive consequences, achieved by means of a situational application of the individual's idiosyncratic learning history upon the current environmental context in order to identify reliable predictors of the likely reinforcing consequences of available choice options. The findings of the study are related to the extant literature on multichannel shopping, the thesis concluding by evaluating the long-term viability of the radical behaviourist perspective and its contribution to the consumer psychology discipline.

Key Words: Multichannel, Behaviourism, Operant, Learning, Consumer.

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1. NEW WAYS OF WONDERING WHY

"One potential reason for the demise of many retail dot.com businesses is their failure to understand the needs of customers in the market place. The technology surrounding e-commerce became so all-consuming that operators failed to undertake sufficient research on prospective customers' reactions to it. Just because something is technically feasible, it does not necessarily make it desirable, never mind the basis for a successful business model."

M. Birkin, G. Clarke & M. Clarke (2002: 91)

Introduction

In a dynamic and turbulent retail landscape, in which new technologies and interactive shopping media are transforming the landscape and structure of the retailing industry, the innovative retail organisation increasingly derives competitive advantage via an integration of traditional physical store and mail-order catalogue operations with the provision of electronic shopping services, the multichannel consumer procuring goods from that retailer via a combination of available access points as multiple routes to purchase (Haydock, 2000; Hutt & Speh, 1992; Kotler & Armstrong, 2001). Yet, despite the rapid growth of academic interest in adoption of this multichannel marketing model, the extant literature may be characterised by an overriding strategic and operational emphasis, research attention typically being directed toward the retailers' management of potential channel synergies and conflicts at the expense of any meaningful exploration of actual multichannel consumer behaviour itself (Nicholson, Clarke, & Blakemore, 2002). Given that successful implementation of the multichannel model, by definition, demands a customer-centric approach to retail marketing management (Langford & Cosenza, 1999), this absence of a consumer-oriented perspective represents a surprising gap in current academic understanding – a gap that the present thesis thus seeks to address.

Locating itself within the emergent contextual stance in consumer research, this thesis explores the issue of multichannel consumption from a behavioural perspective. Specifically, the thesis documents a programme of research, conducted in association with a leading UK apparel retailer, in which the consumer selection and use of multiple retail channels has been examined via a longitudinal application of the Behavioural Perspective Model (BPM) of purchase and consumption (Foxall, 1986, 1999a). Thus, whilst the primary objective of the thesis is to shed

light upon the nature of consumer behaviour within the emergent physical-virtual retail landscape, informing the development of multichannel marketing strategy, a parallel outcome of the thesis is to serve as a critical multichannel contribution to the ongoing conceptual development and empirical validation of the BPM explanatory framework in consumer research.

By way of background, this introductory chapter begins by presenting a broad overview of the development of the multichannel marketing model, noting the operational nature of the extant literature in respect of this particular aspect of retailing and the general absence of a detailed account of a consumer perspective on multichannel shopping. Given the vast array of potential geographical locations in which a consumer may access digital shopping media, the chapter argues that multichannel consumer behaviour is, in fact, a multi-*environmental* phenomenon when viewed from the standpoint of the individual, a facet that demands a person-in-context approach to empirical inquiry. As of 2004, however, research in this area has been largely confined to the ideological position of the *intentional stance*, focusing upon the cognitive dimensions of consumer choice processes, together with their intrinsic (attitudinal, trait-level) and extrinsic (geodemographic, socio-economic) moderators.

The chapter proceeds to argue that the weakness in this predominantly cognitive emphasis is that consumer information-processing activities and their intrinsic-extrinsic moderators are inherently *pre*-behavioural activities (Foxall, 1993a). As a consequence, no account has as yet been forthcoming focusing upon *manifest* (i.e. observable) multichannel consumer behaviour itself and the manner in which it evolves as individuals become more proficient and familiar with emergent shopping media. In order to redress this inherent weakness, the chapter therefore advocates adoption of a complementary *contextual stance to* guide conceptual and empirical inquiry, the goal being to shed light upon the actual manifest behaviour patterns of the multichannel consumer and his or her iterative experiences of the environmental contexts within which (s)he consumes. Given that the behavioural perspective directs attention toward the transactional relationship between organism and environment, and that the radical behaviourist position in particular emphasises the contingent nature of that relationship, the chapter concludes by suggesting that consumer adaptation to the emergent multichannel retail landscape may best be understood within that philosophical standpoint – the Behavioural Perspective Model of purchase and consumption representing the primary synthesis of behavioural analysis and radical behaviourist thinking currently available within the marketing literature.

The Multichannel Retailer

Current and future potential of the Internet as a retail marketing channel has received considerable research attention, academic debate typically focusing upon the likely level of consumer adoption of electronic shopping services and the long-term impact this may have upon traditional "bricks 'n' mortar" retail stores (Doherty, Ellis-Chadwick, & Hart, 1999). In 1995, around 300 active retail Websites could be identified in the United Kingdom, generating total sales of less than £0.2b (Pavitt, 1997). By 2000, however, annual online retail revenues in the UK had exceeded some £2b, with even the most conservative of forecasters predicting that electronic purchase channels would account for almost 10% of all UK retail sales by 2009 (Dennis, Harris, Sandhu, & King, 2001).

Unsurprisingly, perhaps, some proponents of Internet shopping cite such rapid growth as evidence of the imminent demise of the high street retailer, Web-based operations such as *Amazon.com* being hailed as the retail giants of the New Millennium (Van Tassel & Weitz, 1997). The reality, of course, is that the traditional retailer holds a distinct competitive advantage over so-called Internet 'pure-plays' by virtue of its superior capital investment capabilities, existing physical infrastructure and sheer strength of brand (Baiden, 2000). High street retailers have thus begun to integrate traditional stores and mail order catalogues with telephone call centres, the Internet and interactive digital television services (iDTV), forging a new multichannel business model that seeks to target existing and potential market segments via both physical and electronic means as multiple routes to purchase (Haydock, 2000).

Yet, successful adoption of the multichannel model is not without its potential pitfalls. Even the most successful of high street retailers, such as *Toys-r-Us*, *Argos* and *Tesco,* have experienced early 'teething' problems and numerous 'false-starts', particularly in respect of technological weaknesses, distribution errors and overall consumer dissatisfaction with service quality (Reynolds, 1997). In general, however, such problems are largely attributable to a focus upon the *channel* rather than upon the *activity*, fledgling multichannel marketers frequently affording minimisation of potential channel conflicts a higher priority than successful management of the consumer shopping experience (Halpin, 2000).

Today's consumer enjoys unprecedented levels of buyer power. Armed with his or her own sophisticated arsenal of search engines, databases and Internet tracking technologies, (s)he is able to take full advantage of the new "many-to-many" model of marketing communications and exploit new opportunities for information search and exchange, product/price comparison and consumer-vendor negotiation (Hoffman & Novak, 1997; Loewe & Boncheck, 1999). The multichannel consumer is thus a more sophisticated and strategic consumer, demanding exceptional levels of quality, service and convenience, delivered via a purchase and distribution

strategy that facilitates unhindered movement from channel to channel as the purchase situation demands, all channels operating in synergy to ensure that goods purchased via one channel may be managed via another (Baiden, 2000). In other words, successful implementation of the multichannel model requires a *customer-centric* approach to all marketing activities – an approach in which a grounded knowledge of consumer behaviour must become not the exception but the rule (Langford & Cosenza, 1999).

The new breed of multichannel retailer, then, can be defined by its integration of traditional physical stores and/or catalogue operations with interactive shopping media. Typically, adoption of such a model follows a distinct developmental pattern. Initially, the retailer will utilise a new electronic medium such as the Internet for communicative purposes only, offering online information to consumers about the organisation and its products and services in order to increase brand awareness (Bruno, 1997). Over time, the content provided gradually becomes more interactive, consumers being invited to request specific product/service information as an aid to decision-making (Hazel, 1996). Finally, once the infrastructure is in place and the "click-through" rate is sufficient, the Web site becomes a true retail marketing channel as software is added to manage online purchase transactions (Hoffman, Novak, & Chatterjee, 1996).

As highlighted above, this transition to interactive electronic channels such as the Internet holds a number of potential sources of competitive advantage for the established physical retailer over Internet pure-plays. In particular, start-up costs tend to be considerably lower, any infrastructural requirements already being largely in place to manage order processing, distribution and/or product returns activities by virtue of existing store and/or retail catalogue operations. Related to this, existing marketing channels can also be used to promote consumer awareness of emergent media, effectively circumventing the high advertising spends associated with achieving market presence for a novel online brand. Most importantly of all, perhaps, the retailer's existing brand strength serves to overcome, at least to some extent, consumer resistance to novel purchase channels, perceptions of trust, quality and value being transferable to the new shopping medium via effective marketing management (Baiden, 2000).

The latter point is crucial, however. Successful implementation of the multichannel marketing model requires very careful management of all customer entry points, consumer dissatisfaction with the emergent purchase channel holding a potential to damage overall brand perceptions merely by association (Langford & Cosenza, 1999). Steps must therefore be taken to ensure consistency in brand image across all available purchase channels, underpinned by provision of a *true* multichannel retail operation, in which a synergy of channel strengths is achieved such that the consumer may move from channel to channel with relative ease. In other words, successful implementation of the multichannel model requires a thorough understanding of how and why consumers behave as they do (Merenski, 1999).

The Multichannel Consumer

The difficulty inherent in the above definitions of the multichannel marketing model, however, is that they are operational in emphasis, directing research attention toward the management of potential channel conflicts at the expense of any empirical investigation of the consumer adoption and use of multiple retail channels, together with everyday experiences of them (Langford & Cosenza, 2000; Nicholson, Clarke, & Blakemore, 2001). Given that successful implementation of the multichannel model demands a customer-centric approach to marketing strategy formulation, this insistence upon an operational perspective, rather than a behavioural one, is perhaps a surprising omission, representing a significant gap in current academic understanding.

Yet, by directing research attention toward the consumer rather than the retailer, it becomes possible to begin to appreciate the true impact of electronic media such as the Internet upon the everyday shopping activity. Historically, consumer researchers have tended to situate the act of shopping within a public-private dichotomous framework, shopping within the social retail 'servicescapes' of the store and the mall being seen as distinct from the largely solitary pursuit of remote catalogue shopping within the home. Only minimal exceptions from this dichotomy have traditionally been recognised, such as the staging of social "party plan" events within an individual's private household. By virtue of the World-Wide Web, however, the number of potential consumption spaces becomes considerable, blurring the distinction between the public and the private. Seemingly private acts of remote shopping can be endowed with a novel social dimension, for instance, where online ordering facilities are being accessed via an Internet café or the office PC. Similarly, public acts of shopping can become "privatised", consumers ordering goods online via an Internet kiosk located within the target retailer's physical store. Even where consumers are engaging in an apparently solitary act of electronic shopping within the home, the reality may well be that they are in fact interacting with others in some online community or consumer-based "chat room" (Barnatt, 1998; Burton, 2002; Gould & Lerman, 1998; Venkatesh, Meamber, & Fuat Firat, 1997).

Consider channel combinations, too, and the picture becomes more complex still. A consumer may research goods online prior to a physical store purchase, or else (s)he may sample goods in a physical store prior to an electronic purchase. It has even become possible to order or reserve goods electronically, then collect them from a store, or else purchase goods electronically for home delivery and return them to a store for refund or exchange. In other words, consumer behaviour has become characterised by a novel *physical-virtual interface*, the individual often navigating both physical and electronic retail formats during the course of a single everyday shopping activity (Nicholson et al., 2002).

The notion of an emergent physical-virtual interface is an important conceptual distinction. To the retailer, the instances of multichannel shopping highlighted above are often regarded merely as cases of the consumer selecting and purchasing goods via either single or multiple retail channels. Seen from the standpoint of the individual consumer, however, this interface in practice means that the advent of interactive shopping media has led to a rapid expansion in the number of different modes of shopping available to the consumer and in the number of possible spatial-temporal contexts in which those modes of shopping may be accessed. Put another way, the consumer does not experience multiple retail *channels*; rather, (s)he in fact experiences multiple physical, social and "cyber-spatial" retail *environments*.

By adopting a customer-centric view of multichannel shopping rather than a retailer-centric one, then, it becomes possible to re-conceptualise multichannel consumer behaviour as a *multi-environmental* phenomenon. To the individual consumer, the electronic shopping "revolution" represents an explosion in the number of environments in which the act of shopping may be located, traditional patterns of spatial-temporal relations being rendered inadequate as explanatory tools within an increasingly fluid and dynamic physical-virtual landscape. Thus, if the consumer psychologist is to make any meaningful contribution to the successful formulation of multichannel retail marketing strategy, an environmental perspective becomes an essential prerequisite of empirical inquiry. In other words, multichannel consumer behaviour can *only* be understood fully by reference to the environmental contexts within which it occurs.

To date, however, the general issue of the consumer use of multiple retail channels has been largely ignored by psychologists, consumer research in the main continuing to focus upon use of individual channels *in isolation*; i.e. store, catalogue *or* Internet (e.g. Jones & Vijayasarathy, 1998; Stell & Paden, 1999; Whan Park, Iyler, & Smith, 1989). Even where a multichannel dimension *has* been forthcoming, authors have typically sought identify the principle geodemographic and/or psychographic characteristics of those market segments who are (or are not) multichannel consumers, or else to construct a cognitive account of the developmental process via which an individual becomes a multichannel consumer and/or seek to develop metrics of associated attitudinal and trait-level determinants of channel choice (e.g. Athiyaman, 2002; Citrin, Sprott, Silverman, & Stem Jr 2000; Goldsmith, 2001; Jayawardhena, Wright, & Masterson, 2003; Kaufman-Scarborough & Lindquist, 2002; Loewe & Boncheck, 1999; Park & Jun, 2003; Parsons, 2002; Reardon & McCorkle, 2002; Reynolds, 2002; Schoenbachler & Gordon, 2002; Sultan & Henrichs, 2000; Vrechopoulos, Siomkos, & Doukidis, 2001; Walsh, Mitchell, Frenzel, & Wiedmann, 2003; Wu, 2003; Youn-Kyung, 2002). Put another way, the tendency has been toward either the development of macro-level market segmentation bases or the investigation of micro-level determinants of channel adoption, at the expense of any meaningful investigation of actual multichannel consumer behaviour itself and the physical or virtual settings within which it

occurs. As a consequence, although much is now known as to which consumer segments engage in multichannel purchasing and the primary determinants of these segments, little empirical work has been forthcoming that may shed light upon what it is that multichannel consumers actually *do*.

Putting Multichannel Shopping in its Place

To shamelessly paraphrase Dawkins (1982:1) and his much-cited prologue to *The Extended Phenotype*, this thesis may be regarded as a work of advocacy. It argues in favour of a particular way of understanding multichannel consumers and a particular way of *"wondering why they do the things that they do"*. It does not seek to supersede existing models and explanatory frameworks, nor to advocate anything resembling a substantive paradigm shift in consumer psychology. The goal is merely to augment current perspectives upon the behaviour of consumers and to seek *"to ask new questions about them"*. In short, it argues for the adoption of a particular conceptual position.

The field of consumer research is a multidisciplinary endeavour, drawing upon tools and models from across the social sciences in pursuit of a richer understanding of consumer interactions with the products and services of everyday life, and with the marketing of those products and services. As with any multidisciplinary field of enquiry, however, adoption of a historical perspective quickly reveals a pattern of "fads" and "fashions" whereby particular periods in its development are characterised by particular spheres of influence.

In the late nineteenth, consumer research began to emerge from the discipline of classical and neoclassical economics as a distinct conceptual and empirical field in its own right (Loudon & Della Bitta, 1993). The emphasis was upon the economic activities of consumers and, for much of the first half of the twentieth century, economic thought remained prominent, the study of consumer behaviour being framed within a general stance that advocated investigation of concepts such as expected utility, demand plasticity and the "rationality" of consumer economic choice (e.g. Penrose, 1959; Simon, 1955; Thurstone, 1927). Such approaches persist today and, in the wake of Reilly's (1931) formulation of the *Law of Retail Gravitation* and the sociologist G.P. Stone's (1954b) development of the first recognisable consumer taxonomy, have become an integral part of geographical and socio-economic perspectives on consumer behaviour and a fundamental component in modern geodemographic approaches to retail market segmentation (e.g. Caldwallader, 1975; Fotheringham, 1988; Fotheringham & Knudsen, 1984; Lloyd & Jennings, 1978; Smith, 1975; Timmermans, Borgers, & Gunshing, 1991).

Unsurprisingly perhaps, the most prominent social-scientific influence exerted has nevertheless been that of the discipline of psychology and this has been evident throughout the above developmental process, ever since behavioural economists first sought to draw upon and integrate psychological explanatory frameworks in their investigation of microeconomic activities (for reviews, see: Katona, 1963; Katona, 1975; Rabin, 1998; and van Praag, 1985). The nature of this influence has changed and evolved, mirroring emergent trends in the parent discipline itself. It is thus possible within the history of consumer research to witness the parallel rise and fall of the Freudian Empire (Dichter, 1964), the counter positing of the stimulus-response paradigm (Hoch & Ha, 1986), the fluctuating preoccupation with dispositional individual differences (Albanese, 1993) and the more recent subtle shift toward neo-Darwinism (Bristow & Mowen, 1998b).

Despite this psychological eclecticism, by far the most influential influence upon consumer research has been that exerted by the cognitive paradigm, together with its fundamental tenets of human information-processing and semi-rational choice (Foxall, 1980). Cognitive accounts of consumer behaviour are characterised by attempts to model the consumer choice process in a pseudo-scientific "flow-chart" or "network" format, encompassing all of those information search, processing and evaluative activities that individuals engage in whilst determining what to buy and where to buy it. Where researchers *do* deviate from this preoccupation with the information-processing metaphor, as in the statistical exploration of likely personality and motivational determinants of consumer choice, or in the evaluation of extrinsic variables located within the proximal and distal environments, the tendency has been toward conceptualisation of such factors purely in terms of potential *influences upon cognition*, rather than in terms of *influences upon behaviour* (e.g. Baumgartner, 2002; Dabholkar, Bobbitt, & Lee, 2003; Stoltman, Morgan, & Anglin, 1999; Uzzell, 1995). In other words, psychological consumer research has become a *cognitivist* consumer research, information-processing activities and their intrinsic and extrinsic moderators being considered almost the only legitimate foci of empirical inquiry; indeed, to suggest otherwise is at times to be regarded as being *"perverse, heretical or just plain incomprehensible"* (Foxall, 1993a:46).

This is not to in any way to underestimate the significant contributions made by cognitive consumer researchers. Cognitive models of consumer choice have a capacity to shed light on important aspects of product and purchase channel selection, particularly where intrinsic and extrinsic moderating variables are accommodated within their schematic representations, and several noteworthy models have been forthcoming that have yielded valuable insights into the consumer decision-making process (e.g. Engel, Blackwell, & Miniard, 1995; Howard & Sheth, 1969; Nicosia, 1966). Nevertheless, this preoccupation with the computational metaphor can be deemed counterproductive for four fundamental reasons: (1) rigid adherence to *any* explanatory

framework, however valid, may stifle intellectual enrichment, denying consumer research the degree of controversy and debate essential to its avoidance of conceptual stagnation (Dennett, 1987); (2) the field of inquiry has thus become monistic, running contrary to the persistent calls for conceptual and methodological pluralism across the social sciences (e.g. Feyerabend, 1975; Mills, 1959; Ziman, 1991); (3) this monism has diverted empirical inquiry away from adequate exploration of emitted consumer behaviour itself, supposedly the primary subject-matter of the discipline, information-processing activities, their moderating variables and outcome evaluation judgements being inherently *pre*-behavioural and *post*-behavioural acts (Foxall, 1993b); and (4) as a consequence of this cognitive emphasis, and of particular concern in respect of the present research programme, consumer behaviour has tended to be portrayed as a largely *de-contextualised* act, divorced from adequate investigation of the complex transactions between the individual consumer and the socio-physical environment within which (s)he consumes (Uzzell, 1995).

In respect of the specific goal of exploring multichannel consumer behaviour, these limitations have led to significant gaps becoming apparent in both academic and practitioner understanding of this as yet still emergent phenomenon. Despite the proliferation of recent publications on the subject of multichannel shopping evident in the literature and highlighted above, relatively little is known as to *how* consumers use multiple purchase channels and the manner in which this usage evolves over time in light of individual experience. This thesis therefore advocates a *contextual stance* to guide theoretical and empirical investigation of multichannel consumer behaviour, seeking to examine the consumer selection, use and integration of multiple retail purchase channels and the extent to which this iterative process is modulated via an ongoing and inherently transactional relationship between the individual consumer and the environmental contexts within which (s)he consumes (Stokols & Shumaker, 1981). This is not to abandon the cognitive paradigm, nor to seek to supersede it; it is merely to add a new level of analysis to an emergent consumption phenomenon and, in the process, to endeavour to enrich academic understanding of the multichannel consumer via conceptual and empirical augmentation.

As Foxall (1999c) observes, the potential contributions to be gleaned from adoption of a contextual stance are three-fold: (1) to shed light upon the extent to which consumer behaviour may in part be environmentally contingent; (2) to yield insight into the manner in which previous consumption experiences have shaped, and are continuing to shape, subsequent purchase behaviours; and (3) to serve as a platform upon which to construct informed predictions in respect of future patterns of consumer behaviour and the extent to which they may be contingent upon the management of factors within the retail environment. In respect of the practice of retail marketing, the significance of this latter contribution should not be understated for it is precisely those environmental stimuli that have shaped previous purchase and consumption behaviours that will often be most under the marketer's future control (Nicholson et al., 2002).

Finally, over the course of the lifespan, consumer behaviour – like any other behavioural form - evolves as a function of both environmental changes, such as the development of the multichannel business model and its associated available consumption spaces, and of the development of an individual learning history in which the outcomes of past and present consumption experiences develop a capacity to shape and guide future ones. Put another way, by virtue of an iterative process of *operant learning*, each encounter with the environment is adaptive in that it holds a potential to exert influence upon future encounters, a process which, rather than making behaviour a static entity, renders it *phenotypic* in character, making adoption of an behavioural perspective critical to the social-scientific investigation of any act of behaviour - including multichannel consumer behaviour (Dawkins, 1988; Foxall, 2003; Skinner, 1966, 1981; Van Parijs, 1981).

Consumers in the Retail Environment

Central to the contextual stance in the social sciences, and to behavioural perspectives in particular, is the notion that individual behaviour can only be understood by reference to the environmental settings within which it occurs. It thus follows that a crucial first step in seeking to analyse any behaviour must be to define operationally the level of environment to be selected for investigation, together with the spatial-temporal boundaries that delimit it (Bloch, Ridgway, & Dawson, 1994; Cassidy, 1997). As a starting point for this delimitation, a useful conceptual distinction might therefore be drawn between the distal and proximal contexts in which consumer behaviour is located. The *distal environment* encompasses all those historical, cultural, economic and legal factors that may exert influence upon the consumer, ranging from confidence in the performance of the macro economy through to those socio-cultural rules, rituals and 'taboos' that may be characteristic of the macro-level place and time in which consumption occurs. By contrast, the *proximal environment* represents the more immediate context of consumption, such as the physical space, temporal location and social setting in which the individual consumer shops (Troye, 1985).

As a consumer research domain, the former distal environment can be a fruitful source of empirical data, particularly where the investigation conducted is grounded in geodemographic, socio-economic and socio-cultural frameworks. Indeed, the body of knowledge accumulated via exploration of factors within the distal environment is not insubstantial, encapsulating aspects of consumption as diverse as: ethnic variations in consumer behaviour; the relationship between purchase patterns and socio-economic categories; the demographic characteristics of youth subcultures; the household as a context for consumer decision-making; and the social and cultural contexts of opinion leadership (e.g. Fisher, 1987; Lowery, 1991; Moschis & Churchill,

1979; Moschis & Moore, 1985; Sheth, 1974). Similarly, in respect of the specific issue of consumer use of emergent interactive shopping media, a distal perspective has been adopted in the study of factors as diverse as: international variations in Internet shopping uptake; psychographic characteristics of adopters and non-adopters; childhood responses to Internet advertising; market incentives for consumer e-commerce participation; and social aspects of the diffusion of new media (Alba et al., 1997; Eastlick & Lotz, 1999; Henke, 1999; Scribbins, 1999; Williams, Strover, & Grant, 1993). When combined with attitudinal and lifestyle data, studies such as those highlighted above become viable market *segmentation bases*, permitting retailers to develop complex typologies of the dominant customer "types" utilising available purchase channels.

Ever since Stone first defined four main categories of shopper on the basis of interviews conducted involving 124 department store patrons in the 1950s, marketers have sought to classify consumers into convenient typologies on the basis of their geodemographic and psychographic characteristics (Stone, 1954a). Thus, over the years, a number of similar typologies have been developed on the basis of consumers' positions in the distal environment, including: seven categories of suburban housewife; five types of grocery shopper; eleven classes of 'heads of households'; and six segments of financial services purchaser (Darden & Ashton, 1975; Kirk-Smith & Mak, 1992; Lesser & Hughes, 1986; Williams, Painter, & Nicholas, 1978).

More recently, the technique has been extended into the virtual domain, similar typologies being formulated to accommodate categories of Internet shopper, based on segmentation bases such as: lifestyle and attitudinal groupings; geodemographic clusters; and consumer lifestyle profiles (e.g. BMRB, 2002; FletcherResearch, 1999; Vijayasarathy & Jones, 2000). **Table 1**, below, summarises some notable "shopper typologies" to have emerged in the literature over the past half-century in the wake of Stone.

Useful though distal classifications such as the above are, however, there are a number of disadvantages inherent in the methodology. In particular, typographical approaches to market segmentation based on distal variables have a tendency to assume that an individual's position within a proposed taxonomy remains static over time and across situations, that all consumers within a category are motivated to attain the associated consumption emblem of that category (e.g. a new BMW motor car), and that the somewhat idealised lifestyle categories consumers occupy in some way accurately reflect *actual* patterns of consumption (For review, see: Solomon & Englis, 1997).

To illustrate these inherent weaknesses, consider the example of a female consumer with strong concerns for the environment and international trade, an individual who in the normal course of events buys products such as "Fair Trade" coffee and might be labelled a "Green Shopper" in

Table 1: Some Notable Shopper Typologies (after Brown & Reid, 1997)

Author(s)	Population	Shopper Types
Stone (1954)	Female Department Store Patrons (N=124)	*Economic* *Ethical* *Personalising* *Apathetic*
Darden & Ashton (1975)	Middle-Class Suburban Housewives (N=116)	*Apathetic* *Demanding* *Quality* *Fastidious* *Stamp-preferer* *Stamp-hater* *Convenience*
Moschis (1976)	Female Cosmetic Buyers (N=206)	*Specials* *Brand Loyal* *Store Loyal* *Problem-Solving* *Psycho-socialising* *Name-conscious*
Williams, Painter & Nicholas (1978)	Grocery Buyers No Sex Specified (N=298)	*Apathetic* *Convenience* *Price* *Involved* *Unclassifiable*
Bellenger & Korgaonkar (1980)	Adult Shoppers Male: 31%; Female: 69% (N=324)	*Economic* *Recreational*
Westbrook & Black (1985)	Female Adult Shoppers (N=203)	*Process-Involved* *Choice-Optimising* *Process-Apathetic* *Apathetic* *Economic* *Nondescript*
Lesser & Hughes (1986)	Heads of Household Male: 45%; Female: 55% (N=6808)	*Inactive* *Active* *Service* *Traditional* *Dedicated Fringe* *Price* *Transitional* *Convenience* *Coupon-Saver* *Innovator* *Classified*
Cullen (1990)	Principal Household Shoppers (N=2484)	*Shopping Affect* *Economic* *Apathetic* *Shopping Snob*
Kirk-Smith & Mak (1992)	Financial Services Users Unspecified Mix-Sex (N=2630)	*Uninvolved* *Pleasurists* *Conserving Carers* *Belongers* *Confident Modernists*

some hypothetical marketing typology. One Sunday afternoon, our consumer discovers that she has no coffee, but cannot purchase her regular "Fair Trade" brand as the supermarket she patronises is closed. Rather than manage without coffee until the following morning, she

therefore reluctantly elects to visit the local convenience store and purchase the least expensive brand of regular coffee she can find. Thus, in the course of a single shopping episode, the consumer has ceased to be a "Green Shopper", even if only temporarily, and has become simultaneously a "Convenience Shopper" and an "Economic Shopper" instead. As Solomon and Englis (1997)observe, instances such as these are by no means uncommon and, indeed, consumers seem to be endowed with an almost innate drive to seek to "break out" of such artificial categories as those depicted in the average segmentation schema at every possible opportunity – a particularly unfortunate tendency if, in this example, one was the marketing director of a coffee manufacturer attempting to predict our hypothetical consumer's coffee buying behaviour patterns.

More specifically, within the context of the present thesis, distal techniques such as psychographic segmentation represent broad generalisations of aggregations of consumers only and, if applied within a multichannel context, are therefore likely to reveal little about the *individual* consumer's selection and use of multiple retail channels, together with his/her everyday experiences of them. Furthermore, although less focal variables (e.g. interest rates, political instabilities, current fashion subcultures, geodemographic changes) undoubtedly exert a degree of influence over day-to-day consumption decisions, such factors are rarely under the retailer's control and are likely to be *too* distant from the individual consumer to affect the channel selection process in any substantial and direct way, their sphere of influence perhaps being confined more to affecting the initial decision to make a purchase to begin with. Thus, for the purposes of the present research, the more focal unit of analysis of represented by the proximal environment may be more appropriate and insightful in respect of the current research goals, the aim being to understand environment-behaviour transactions at an *individual* level of analysis and within the specific context of consumer channel selection-usage patterns.

Prior to the 1960s, the dominant empirical perspective on the proximal context in which behaviour occurs tended to be the *subjectivist* paradigm, which viewed the most potent environmental influences on the individual as being those variables perceived and interpreted by the person him/herself. In part, this focus upon the *environment-as-perceived* can be traced back to the psychodynamic school in psychology and Freud's emphasis upon the significance of the early childhood environment and the internalisation of society's behavioural rules and norms, encapsulated in the concepts of developmental "psychosexuality" and the "super-ego" respectively (Freud, 1901). This subjectivist position later became associated with non-psychodynamic theorists also, however, and is visible, for instance, in Lewin's exploration of the *psychological lifespace* (Lewin, 1936). The emphasis throughout is firmly upon the environment as experienced by the individual and continues to inspire the work of a number of environmental psychologists, such as Mehrabian and Russell who highlight the emotional-affective responses

elicited from the individual upon encountering various proximal stimuli (e.g. Mehrabian & Russell, 1974; Russell & Mehrabian, 1978).

A subjectivist perspective is useful in that it draws attention to the ways in which aspects of the environment, particularly the built environment, become socially meaningful to the individual. The shared sense of identity of football spectators, for instance, is in part a product of congregation in the stadium at the centre of their shared interests. Conversely, aspects of the built environment may at times impair integration in society and the expression of individual identity; e.g. the isolation of elderly residents in urban developments devoid of adequate public transport systems, community meeting spaces, etc., or the constraints placed upon retail store choice in areas devoid of particular forms of retail outlet. A "sense of place" is thus important to the individual, particularly in respect of the degree of "fit" or "mismatch" between environmental characteristics and human needs/wants/desires. (Canter, Jesuino, Soczka, & Stephenson, 1987; Stephenson, 1988; Sturdivant, 1970).

By the late 1960s, however, a number of theorists had began to express dissatisfaction with the subjectivist paradigm, arguing that such a perspective on human-environment relations tended to overlook those aspects of the environment *not* consciously perceived and interpreted by the individual. The environment does not exist purely "in the heads" of those persons experiencing it but, in fact, encompasses a rich spectrum of characteristics that may impact upon behaviour with or without any conscious recognition or intent (Wohwill, 1973). As a consequence of such observations, together with a growing dissatisfaction with accounts of environment-behaviour relationships relying solely upon introspection, a number of authors began to explore aspects of the environment exerting influence upon behaviour that may be objectively measured; the *objectivist* paradigm.

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At the heart of the objectivist position is a desire to identify, describe and measure recurrent patterns of behaviour observable within a particular context, perhaps the best-known conceptualisation being the notion of the *behaviour setting*, a level of the proximal environment in which particular patterns of place-behaviour-time relations are observable, irrespective of the individual actors present. According to Barker (1968), most forms of social behaviour are spatially and temporally bound to a particular concept of place, such as watching a football game in a stadium, worshiping God in a church and, of course, shopping for groceries in a supermarket. Regardless of the persons present, the same patterns of behaviour are observable in that place at any given moment in time. Thus, whoever the consumer is visiting a supermarket, (s)he will typically enter the store, select a shopping cart, move up and down the aisles selecting products, stand in line at the checkout, unpack the cart, pay for the goods, and so on. Barker termed such repetitive patterns of behaviour associated with a particular place *behavioural programmes* and argued that the primary focus of the contextual approach should be to study these programmes objectively as though the behaviour setting itself were a scientific laboratory.

The influence of Barker's concept of the behaviour setting and its associated behavioural programmes has been considerable, environmental psychologists, behavioural geographers and architects alike seeking to identify dominant programmes elicited by the built environment and modify those programmes via changes in spatial layout and design. For instance, Sommer has demonstrated that it is possible to increase the number of social interactions observable in a residential home for the elderly simply by moving rows of chairs away from the walls of the lounge area and grouping them around tables, whilst Holahan has achieved substantial changes in patient-to-patient and staff-to-patient relationships in a psychiatric ward by radically varying the layout and décor of the ward from the traditional "Nightingale" format (Holahan, 1976; Sommer, 1969). More recently, a number of theorists have extended this notion of modifying the configuration of a behaviour setting in order to vary the behavioural programmes enacted within

it to investigate a range of social issues. Thus, psychologists have been consulted by policy-makers on a number of practical social problems, such as the re-configuration of football venues in order to deter hooliganism and the design of new housing estates to discourage vandalism and petty crime (Canter et al., 1987; Newman & Franck, 1982). Within the specific context of retailing, Barker's emphasis upon the naturalistic study of behaviour settings has also been applied in the analysis of the physical and social organisation of supermarket environments and the plethora of consumptive and non-consumptive activities undertaken within the typical shopping mall (Sommer, 1998; Uzzell, 1995).

Despite such successes, however, critics of the objectivist paradigm have been quick to point out that the enthusiasm for behaviour setting analysis has, at times, been guilty of portraying human beings largely as automata, responding passively to environmental stimuli and enacting the behavioural programmes required of them, in much the same way that early theorists in the school of behaviourism at times portrayed individuals as merely victims of learned stimulus-response associations in their overly simplistic extrapolations of observations in the animal learning laboratory to the conceptualisation of human behavioural responses. The reality, of course, is that the proximal environment is endowed with *both* objective *and* subjective characteristics, the social meaning of a place frequently being the motivating factor behind the individual's presence in that place and subsequent enactment of the appropriate behavioural programme. Thus, an exclusive fashion store such as *Kookai* may be of aspirational significance to a consumer who, once drawn to that store in response to the allure of designer clothing, may nevertheless enact a set pattern of consumption behaviours consistent with all other consumers visiting that retail outlet. Moreover, in certain circumstances, particular individuals may deliberately elect to violate the norms associated with a behaviour setting and disrupt the programmes being followed by others; e.g. by speaking loudly in a library, engaging in violence in a public house, and so on. In other words, Barkerian environmental theorists perhaps underestimate the extent to which the behaviour setting itself is sustained by the subjective and consensual actions of those who populate it for the duration of its life cycle (Fuhrer, 1990; Wicker, 1987).

For the purposes of this thesis, analysis of multiple retail environments as multiple behaviour settings may yield some insight into similarities and differences in the dominant behavioural programmes associated with consumption via particular purchase channels. However, this emphasis upon how *consumers in general* behave within a specific physical or virtual retail environment would reveal little in respect of those influences upon the *individual consumer* that steer his/her selection of that channel or channel combination in the first place and his/her subsequent experiences of them. Thus, a more focal environmental unit of analysis is clearly required for the current research - a unit capable of directing research attention toward the *channel*

selection episode itself, rather than merely toward subsequent use of the channel(s) selected during that episode.

In the late 1960s, at around the same time that Barker was formulating his concept of the behaviour setting, a number of consumer researchers also began to focus attention upon the proximal environment, selecting a smaller unit of analysis still in an attempt to get closer to the nature of the individual-environment transaction. In the main, this shift in research emphasis toward the environment, and away from the individual, was symptomatic of a more general dissatisfaction with the low predictive power of person-bound characteristics, particularly personality characteristics, as correlates of consumer behaviour and decision-making (e.g. Engel, Kollat, & Blackwell, 1969; Kassarjian, 1971; Lavidge, 1966; Ward & Robertson, 1973), factorial studies repeatedly demonstrating that person-bound characteristics account for, at best, no more than 10% of the observed variance. The underlying motivation was thus a desire to identify a sufficiently micro-level unit of environmental analysis that, if explored systematically, may yield more reliable and objective predictors of consumer buying patterns.

The unit of analysis selected for investigation was the retail shopping *situation*, a time-delimited sub-domain of the proximal environment in which a particular pattern of *individual*-environment transactions is observable in a specific place and for a limited duration (Clitheroe Jr., Stokols, & Zmuidzinas, 1998). Put another way, a shopping situation is a particular consumer behaviour episode occurring at a specific point in time and space, seen through the eyes of the individual consumer him/herself (Hackett & Foxall, 1993).

The conceptual distinction between the behaviour setting and the situation is an important one as it directs research attention firmly to the individual level of analysis. To illustrate this distinction, consider again the earlier example of the fashion consumer drawn to visit the 'designer' store *Kookai.* The *Kookai* store will be open for a set duration on any particular day, a large number of consumers entering that store in order to browse, examine merchandise, try on garments, purchase goods, and so on. In Barkerian terms, the *Kookai* store thus constitutes a behaviour setting, the consumers entering that store enacting the behavioural programme highlighted above.

Now consider the specific example of female *Consumer X* entering the *Kookai* store, on *Day Y* and at *Time Z*, searching for a new dress to wear at the forthcoming office Christmas party. *Consumer X* is still one of the many customers entering that behaviour setting and following an observable behavioural programme. However, from a situational perspective, she is also in a given store, on a particular day and at a particular time, shopping for a specific garment for a specific occasion. In other words, to *Consumer X*, this constitutes a unique act of shopping, as she will never be in that store, on that day and at that time, for that purpose again.

Within the context of this study, the retail shopping situation is therefore the level of analysis with the greatest potential explanatory power. A key objective of the current research is to explore the *individual* consumer's use of multiple retail channels, a behaviour that is inherently situational in character. Why is *Consumer X* visiting the *Kookai* store in person? Has she seen a particular dress on the retailer's Website that she wishes to examine more closely? Is this perhaps the only retail channel open to her as this is a last-minute purchase? Perhaps she cannot really afford the new dress until 'payday' and she is there simply to charge a new outfit to her store-card to delay payment? Questions such as these can only be addressed via the individual level of analysis, this historically and spatially specific act of consumer behaviour constituting a unique retail shopping situation.

Figure 1: Levels of Environment (After: Belk, 1975; Hackett & Foxall, 1993)

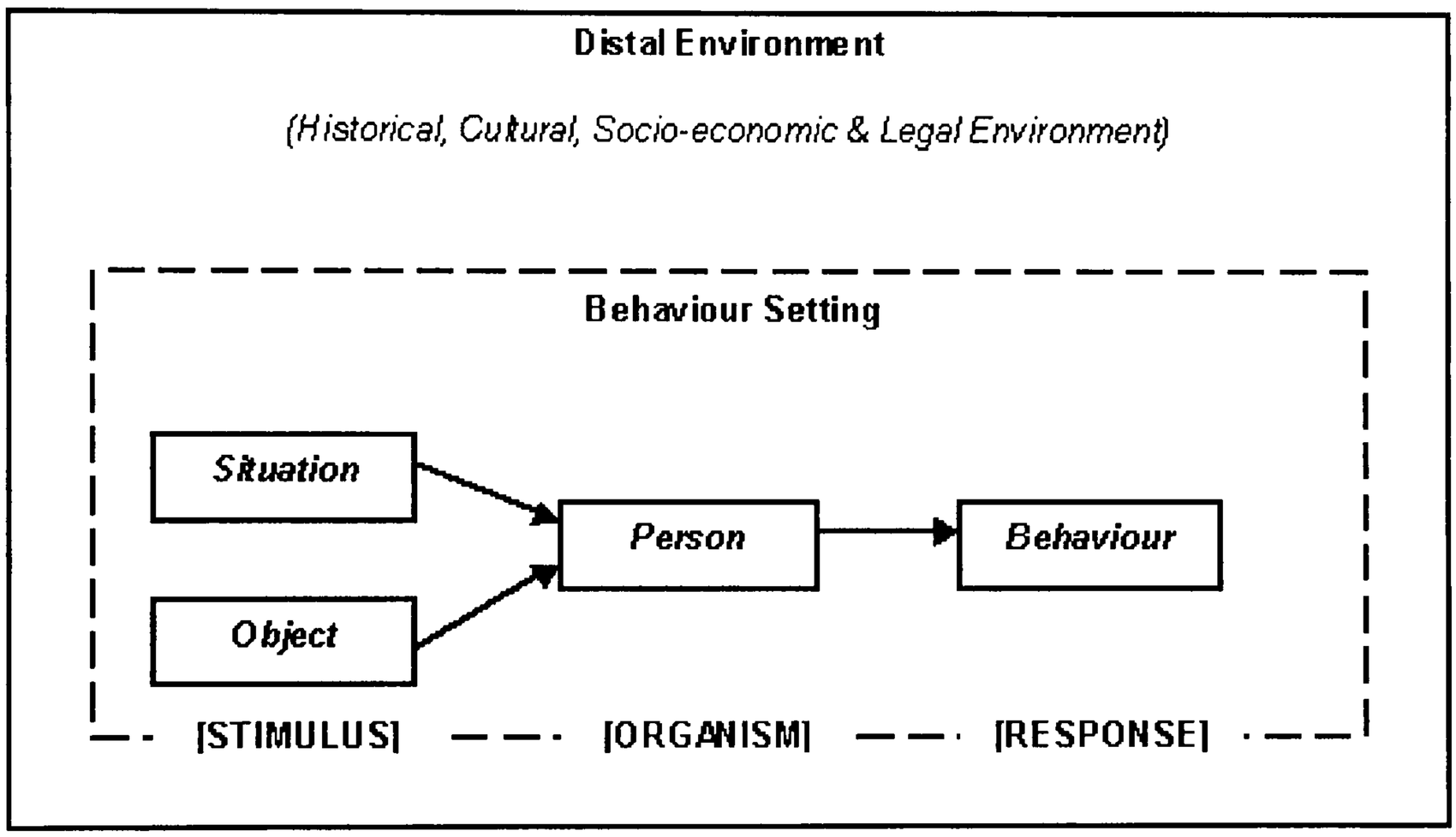


Figure 1 above illustrates this distinction between the shopping situation and less focal environmental units of analysis. At the broadest level, the outer box represents the distal environment, encompassing all those historical, cultural, socio-economic and legal factors that may exert influence upon both *Consumer X* and the fashion retailer *Kookai.* The inner box depicts the behaviour setting, part of the proximal environment, and represents *Consumer X* actually in the *Kookai* store following an observable behavioural programme. Within this behaviour setting, however, we can see both the person (*Consumer X*) and her behavioural response (purchase/non-purchase), determined in part by aspects of both the situation (shopping in *Kookai* for a new dress for the Christmas party) and the object (i.e. the garment *Consumer X* buys). In respect of this

latter set of relationships, the situation-object-person-behaviour flow represents a typical *stimulus-organism-response* view of behaviour (Belk, 1975). Characteristics of both the object the individual is responding to, and of the situation she is in, exert influence upon the consumer herself, these influences interacting with person-bound characteristics to generate the response that is the act of purchase.

In many respects, the inner portion of **Figure 1** also represents a crude model for the focus of the current thesis, characteristics of the situation being hypothesised as interacting with person-bound variables in order to determine consumer channel usage and preference patterns. But, what are these "characteristics of the situation" requiring investigation, via what means does this transactional process actually occur, and to what extent is this an iterative process of learning and adaptation to a dynamic and competitive retail environment? In order to address such questions, it is necessary to adopt a conceptual position that seeks to go beyond the mere delimitation of levels of the retail environment and their spatial-temporal boundaries and, instead, to consider the transactional and contingent nature of the person-situation relationship – a conceptual position that, by definition, lies at the heart of behaviourism.

A Behavioural Analysis of Multichannel Shopping

In sum, as of 2004, the issue of multichannel consumer behaviour has received relatively little research attention from consumer psychologists interested in the individual level of analysis, academic research in the main typically focusing upon consumer adoption and use of individual shopping channels in isolation. Where a multichannel dimension *has* been forthcoming, the tendency has been toward investigation of macro-level and micro-level determinants of multichannel consumer behaviour at the expense of any systematic investigation of that behaviour and the consumption spaces within which it occurs. In short, extant discourse on multichannel shopping is inherently de-contextualised, representing a not insubstantial gap in current understanding of consumer adaptation to the evolving multichannel retail landscape.

Against this background, this thesis explores the consumer use of multiple retail formats from a broadly behavioural perspective. Specifically, the thesis documents a programme of research conducted in association with a leading UK apparel retailer in which multichannel consumer behaviour has been examined via a longitudinal application of the Behavioural Perspective Model (BPM), a radical behaviourist interpretive framework. The apparel sector represents an appropriate context from which to generalise by virtue of: (1) the prominence of apparel products throughout the development of novel retail formats such as the Internet, clothing representing one of the first major product categories to become established online alongside

books, compact discs and computer software; (2) the level of retailer presence achieved across formats, apparel retailers being one of the largest, most established and most sophisticated adopters of the multichannel marketing model; and (3) the multi-faceted nature of consumer behaviour within this sector, apparel purchasing encompassing both functional and hedonic motivations depending upon the particular shopping situation in question (Goldsmith & Flynn, 2004).

Conceptually, the thesis locates itself broadly within the behaviourist interpretation of organism-habitat relationships and, more specifically, at the interface between environmental psychology and radical behaviourism, advocating adoption of a behaviour-in-context approach to conceptual and empirical inquiry as a counterpoint to the predominantly cognitive and pre-behavioural extant literature on multi-format and format-specific shopping modes. Structurally, the thesis thus begins by presenting a brief overview of the background to the BPM, observing its origins in radical behaviourism and the status of that psychological paradigm as an interpretive framework. The discussion proceeds to present the BPM conceptual framework in depth, exploring the primary components of that framework and previous attempts to both define and measure them within the environmental psychology and consumer research literatures. Eight specific classes of consumer behaviour are then identified within the literature, each defined by a particular set of person-situation contingent relationships, the literature review chapter of the thesis concluding by seeking to map consumer use of multiple retail channels within that eight-class taxonomy in order to generate robust research propositions as a basis for subsequent empirical inquiry.

Given that the BPM is an inherently interpretive framework, the empirical phase of the thesis begins by discussing the so-called "interpretive shift" in consumer research in recent years and the status of the BPM as a neo-positivist contribution to that shift. On the basis of a review of previous attempts to measure the core BPM constructs empirically, a particular behaviour-analytical strategy is then developed, involving a fusion of both quantitative and qualitative research techniques in order to endeavour to obtain viable metrics of aspects of manifest multichannel consumer behaviour, the empirical chapter concluding by seeking to apply that behaviour-analytical strategy within the specific context of the present thesis' investigation of a cohort (N=30) of UK retail apparel consumers.

Following presentation of summative results from the empirical stage, the thesis proceeds to discuss the behaviour of the consumer cohort within the organisational framework of the BPM, drawing upon both quantitative and qualitative data from the investigation undertaken in order to describe and explore the evolving channel usage and preference patterns of the cohort, observing the extent to which the multichannel patterns identified may be accommodated within the BPM's eight predefined classes of consumer behaviour. The dominant situational factors associated with each class of behaviour are also highlighted, together with their particular clusters of person-

environment contingencies, the implications of such facets being examined in respect of multichannel retail marketing management and practice. Finally, the relative strengths and weaknesses of the empirical work undertaken are identified, together with potential directions for future research, the thesis concluding by evaluating its broader overall contribution to the ongoing conceptual development and empirical validation of the BPM framework itself.

Taken in sum, the anticipated contributions of the thesis may thus be summarised as follows:

- An understanding of the consumer selection, use and integration of multiple retail channels, together with everyday experiences of those channels
- Insight into the adaptive nature of consumer behaviour within an evolving physical-virtual retail landscape, and of the role of operant learning as the principle mechanism of that adaptation
- Extension of the BPM explanatory framework itself, hitherto applied in traditional store-based retail settings only, via application of that framework in remote shopping contexts only, thus offering a broader contribution to the ontological and epistemological development of the behaviourist approach to consumer research

2. SELECTION BY CONSEQUENCES

"The customer is to the manufacturer, the department stores and the advertising agencies what the green frog is to the physiologist...To know anything about the customer, one has to dissect the customer until it is known what he wants and needs and only then can the marketer properly provide a product."

J.B. Watson (1922: 26)

Introduction

In 1615, the playwright Lope de Vega documented the plight of an unfortunate Monk in a remote Spanish monastery who, as punishment for some unspecified sin, had been instructed by the Abbot to eat his supper each evening from the kitchen floor. To compound the Monk's misery, he also found he had competition for his food in the form of a group of monastery cats, all of whom would circle the food and endeavour to steal it whenever the Monk attempted to eat. One dark night, his patience finally snapping, the Monk took the cats out into the courtyard, placed them in a sack and beat them severely and repeatedly with a very heavy stick. Unsurprisingly, perhaps, the cats wailed in agony each time they were beaten. However, the brutal Monk also had a particularly acute cough and, after several instances of pausing for breath, coughing and then resuming the cats' beating, he noticed that the animals had begun to scream with pain in response to the sound of his cough, before a single blow had even been struck. From that evening onwards, the Monk therefore merely had to cough when the cats approached his food and the animals would flee in abject terror. Inadvertently, the Monk had stumbled upon the fundamental principles of behavioural adaptation, the cats having learned that their tormentor's cough signalled impending danger and modified their behaviour patterns accordingly (Mowrer, 1960).

The primary objective of this thesis is to explore the issue of multichannel shopping from a behavioural perspective. Specifically, the thesis begins from the premise that the consumer selection, use and integration of multiple retail channels is, in fact, a multi-environmental behavioural phenomenon by virtue of the multiplicity of consumption spaces within which emergent interactive shopping media may be accessed, proceeding to document a programme of longitudinal research conducted in association with a leading UK apparel retailer in which the consumer adaptation to the evolving physical-virtual retail landscape has been examined via a

systematic application of the Behavioural Perspective Model (BPM) of purchase and consumption.

Adoption of a behavioural standpoint can be justified on three specific grounds. Firstly, although the issue of consumer behaviour within the emergent physical-virtual retail landscape is attracting increasing research attention, the extant literature to date remains fixated largely upon identification of geodemographic and/or psychographic market segments or, alternatively, upon the examination of potential micro-level determinants of channel uptake. As a consequence, relatively little is understood in respect of how consumers actually *use* multiple retail formats and their everyday *experiences* of such formats. Given that behaviourism explicitly adopts manifest behaviour in context and its adaptive character as the elected subject-matter, application of such a perspective thus holds a potential to enrich our understanding of how and why multichannel consumers behave as they do.

Secondly, in light of the multi-environmental nature of consumer behaviour within this context, and the accompanying explosion in the number of spatial-temporal settings in which interactive shopping media in particular may be accessed, a more grounded knowledge of the complex relationship between the individual consumer and the retail spaces within which (s)he consumes is clearly required in order to inform both academic and practitioner understanding of consumer behaviour at the physical-virtual interface and the extent to which environmental factors under the marketer's control, either directly or indirectly, may exert influence upon behaviour in an iterative manner. The behavioural perspective explicitly directs attention toward the transactional relationship between individual and environment, together with the role of learning in shaping future individual-environment interactions, rendering it a viable explanatory framework within which to engage in a longitudinal analysis of multichannel consumer behaviour.

Finally, and within this broader behavioural tradition, the specific ideological position of radical behaviourism has been attracting renewed conceptual and empirical interest in recent years, particularly in the European consumer research literature, a number of authors seeking to offer a contextualised account of consumer behaviour and its environmental contingencies as a counterpoint to existing cognitive and cognitive-antecedent perspectives on pre-behavioural consumer choice. Given that the Behavioural Perspective Model (BPM) of purchase and consumption has emerged as the principal explanatory framework within this radical behaviourist stance, but that validation of that framework has thus far been confined to investigations of single-channel shopping episodes only, systematic and critical application of that model's accompanying behaviour-analytical strategy within a multichannel context therefore affords an opportunity to contribute to the ongoing epistemological and ontological development of the BPM framework itself.

Against this backdrop, the present chapter seeks to apply the Behavioural Perspective Model in the construction of a viable account of multichannel consumer behaviour as an organising framework for empirical inquiry. By way of contextualisation, the chapter begins by presenting a brief overview of attempts to conceptualise the contingent and iterative individual-environment relationship and the somewhat fluid status of behaviourist learning theory within that conceptualisation, noting the emergence of so-called radical behaviourism as the formulation that has come to underpin recent analyses of retail consumer choice by virtue of its acknowledgement of intrinsic mental acts, a facet absent from previous methodological-behaviourist accounts of human behaviour that explicitly denied any role of cognition as a valid focus for psychological inquiry. The BPM framework itself is then presented, representing the primary conceptualisation of radical behaviourism in the consumer research literature, the principal components of that model being examined in depth by reference to behavioural perspectives on retail consumer choice. In particular, the chapter identifies eight BPM-derived classes of consumer behaviour that presently serve as a basis for empirical applications of the model, the central theme of the chapter effectively being the extent to which consumer use of store, catalogue *and* Internet purchase channels may be accommodated within that eight-class taxonomy, the goal being to evaluate the potential applicability of the BPM within a multichannel context.

Throughout the discussion, specific research propositions are formulated on the basis of the extant BPM literature on retail store choice and the likely applicability and viability of that model within multichannel contexts also, the chapter concluding by summarising the specific research propositions derived from the BPM framework as a foundation for the subsequent empirical phase of the thesis.

The Evolutionary Basis of Learning

A process may be regarded as evolutionary if successive observations of that process, taken at intervals, display a marked trend (Dawkins, 1986). Such trends may take the form of increments, such as in the mean height of humans with each successive generation, or the amount of information stored on recording media from the era of the gramophone to that of the compact disc; or else trends may be based upon progression, as in the gradated tendency toward bipedalism in human ancestry, or in the transition from horse-drawn vehicles to manned spacecraft via the humble motor car; sometimes, the trend may be both incremental and decremental depending upon the magnitude of the sampling interval, such as recorded variations in the body temperatures of certain fish species in response to habitat changes, or the fluctuating fashions in the lengths of female skirts. Within the context of this study, the rapid growth in Internet usage and the proliferation of online retail Web sites may similarly be regarded as

evolutionary developments, as may the rise in electronic purchasing by consumers since the mid-1990s, or the expansion in the number and form of spatial-temporal access points consumers now routinely utilise (Berman & Thelen, 2004; Loewe & Boncheck, 1999; Porter, 2001; Scott, 2001). As Dawkins observes, however, for a process to be regarded as *truly* evolutionary, there must also be some mechanism in existence to explain such changes and trends.

Within the social sciences, there are many levels of explanation available for a single behavioural phenomenon, some of which may be regarded as evolutionary and some that clearly are not. Tinbergen (1963) suggests that it may be useful to classify these potential levels of explanation as follows:

> *Proximate Level:* exploring the immediate circumstances that motivate an organism to behave in a particular way in a particular situation; e.g. a harassed mother buys a chocolate bar for her child in the supermarket because that child is crying.
>
> *Ontogenic Level:* exploring why the behaviour in question was adopted in that situation and performed in a particular way; the mother had previous experience of such situations and knew that a bar of chocolate would normally stop her child from crying.
>
> *Phylogenetic Level:* exploring the evolutionary origins of the behaviour, from its first performance, and tracking its development over time; a child eating chocolate is merely the present day enactor of a behaviour that is a product of the development of the human digestive system, accompanying taste preferences, and crying as a signal of infant distress.
>
> *Functional Level:* exploring the ultimate consequences of the behaviour in respect of its ability to facilitate or hinder survival, reproduction and genetic transmission; the supermarket incident is but a fleeting moment in the mother's nurturing of the child as a long-term strategy to facilitate its subsequent reproductive success.

Ever since the emergence of sociobiology as a pseudo-Darwinist attempt to construct an account of the evolution of human social behaviour (Wilson, 1975), there has been an unfortunate tendency within the social sciences to view evolutionary explanations with suspicion and hostility in some quarters, as though they somehow challenge the wisdom of orthodoxy. Yet, the above are not *contradictory* conceptual positions; they merely encompass different spheres of inquiry. For any behaviour, all four of Tinbergen's levels of explanation may yield quite different answers to the question of why a behaviour occurs as it does; explanations that are, nevertheless, all simultaneously valid. Certainly, in the case of the harassed mother in the supermarket buying chocolate for her crying child, all four levels of explanation may be simultaneously correct at that

given moment in time. They are thus *complementary* levels of analysis – a particular way of asking questions and of wondering why individuals behave as they do. Given that epistemological development is only ever enhanced by conceptual and methodological pluralism, an evolutionary perspective on any behaviour – including consumer behaviour – would appear essential if understanding of that behaviour is to be enriched (Campbell, 2002).

Within the specific social-scientific discipline of psychology, evolutionary accounts of behaviour typically take one of two forms. In their broadest sense, they fall within the remit of evolutionary psychology in its most prominent and controversial form, seeking to apply neo-Darwinian principles of natural and sexual selection to the study of human behavioural tendencies. At the heart of this super-ordinate form of the emergent paradigm is the desire to explain universalities in behaviour that cross cultural boundaries, hypothesised as being artefacts of an evolved series of domain-specific neural circuits that have been "selected" by environmental pressures because the behaviours they generate facilitate survival, reproduction and genetic transmission (Tooby & Cosmides, 1992). Within this field of inquiry, which operates broadly at Tinbergen's phylogenetic and functional levels, empirical investigation has been directed toward universalities in behavioural facets such as mate attraction and selection, parental investment, social group cohesion and status acquisition, as manifest in behaviours as diverse as: office gossip, courtship, alcoholism, adolescent friendships, language acquisition, rape and domestic violence (e.g. Bjorkqvist, Osterman, & Lagerspetz, 1994; Hrdy, 1999; Konner, 1990; Lees, 1993; Pinker, 1991; Thornhill & Palmer, 2000; Walker, 1984). Within the field of consumer research, these universalities have been applied in areas as diverse as the motivation to consume certain classes of products/services deemed to facilitate environmental functioning and the role of conspicuous consumption activities in enhancing status and prestige (e.g. Bristow & Mowen, 1998a; Douglas, 1996). By applying such conceptual principles, a number of potential research questions immediately present themselves. Why do men covet fast and expensive motorcars, for instance? Why do purchases of teddy bears increase if the design is modified to accommodate a shorter snout? And if album release rates are indeed an index of creative productivity, have almost all jazz and rock musicians *really* peaked by the age of thirty? Whatever the context of inquiry and the accompanying questions and hypotheses, however, the underlying assumption is that certain patterns of behaviour are universal among the human species and a function of the evolved architecture of the human mind, encoded within the *genotype*, thus representing the brain's innate operating system that has been shaped by natural and sexual selection to facilitate reproductive success (Pinker, 2002).

In respect of the investigation of consumer behaviour within the multichannel retail environment, adoption of an evolutionary psychological perspective operating at Tinbergen's phylogenetic and functional levels may shed light upon aspects of this emergent phenomenon,

such as the motivations underlying a desire to explore novel physical and virtual consumption spaces, the reasons behind the tendency to procure certain classes of products and services more than others within such spaces, or the general appeal of interactive shopping media among individuals within particular geodemographic market segments. Such facets are, however, largely pre-behavioural in their scope. Given that the specific objective of this thesis is to examine manifest behaviour in the life of the individual, rather than in the life of the species, and to yield insight into the processes via which individual consumers adapt to novel consumption spaces, more focal levels of analyses are clearly required – levels capable of capturing the proximate and ontogenic aspects of behaviour and the role of such aspects in the individual consumer's adaptation to multiple retail environments. In short, the emphasis needs to be upon the consumer *phenotype*, rather than the genotype, and framed within the broad standpoint of behavioural ecology and its foci upon the adaptive nature of the organism-environment relationship.

In human terms, as explored in the previous introductory chapter, a loose consensus has emerged that views the nature of the individual-environment relationship as a transactional one, characteristics that the individual brings to a particular place of observation interacting with characteristics of that place in order to determine behaviour. Moreover, although it would not be denied that aspects of the distal environment, and of less focal levels of the proximal environment, may exert influence upon the individual, it is at the situational level of analysis that the bulk of this person-environment transaction is likely to occur, given that this is the level at which the individual actually *experiences* the environment and, therefore, is most susceptible to extrinsic behavioural influences (Stokols & Shumaker, 1981). But, by what process is this transaction actually realised? In order for intrinsic and extrinsic variables to interact in this way, some mechanism must exist to moderate that transactional process.

According to Van Parijs (1981), the most commonly hypothesised mechanism mediating person-situation transactions within the social sciences, and of particular saliency to behavioural inquiry, has been the concept of *learning*, which may be defined in its most fundamental sense as any observable change in behaviour resulting from encounters with environmental events. If a young child who has burnt his hand touching a hot iron avoids touching hot irons again in the future, for instance, then learning may be said to have occurred by virtue of the adaptation in behaviour. Similarly, if a consumer who samples a new brand of coffee because it is available at a discounted price then switches to that brand on a regular basis, irrespective of price and simply because she prefers the taste, then it may be inferred that she has learned something about the attributes of one brand of coffee in comparison to another.

Both explicitly and implicitly, this notion that learning represents a key mediator between person-bound characteristics and environmental factors has been a recurrent theme in debates about the

nature of the person-environment relationship in both psychology and behavioural geography since the early twentieth-century and, indeed, has been repeatedly eluded to, both overtly and covertly, in the exploration of levels of environmental delimitation presented in Chapter One. In the discussion of objectivism, for example, it was noted that a common criticism of that perspective on individual and environment has been the assertion that it portrays human beings largely as passive automata being directed by external forces – a criticism also levelled at the school of behaviourism, the primary area of psychology associated with the study of learning in context, from which the objectivist stance originated.

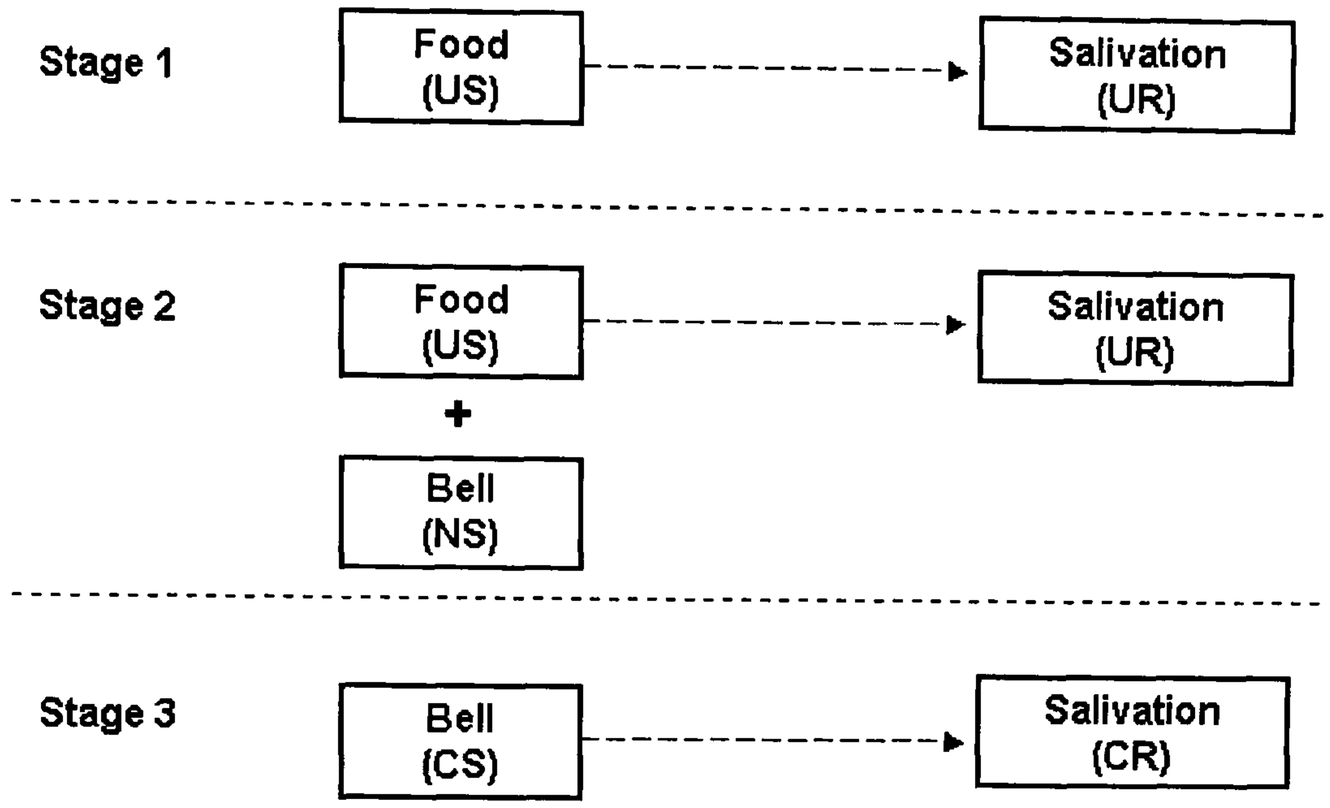
The behaviourist school emerged in the United States in the early 1900s as a reaction to what were seen as the "rampant excesses" of Freudian theory and its over-reliance upon introspective data, obtained mainly via techniques such as free association, psychoanalysis and the interpretation of dreams, which could not be empirically verified. To counter these perceived excesses, early behaviourists argued for the establishment of a "scientific psychology", founded upon purely observable instances of behaviour as data that *could* be classified and measured according to normative science criteria (Toates & Slack, 1990).

The impetus for the development of behaviourist theory lay in the work of Ivan Petrovich Pavlov (1849-1936), who famously observed that a dog would salivate at the mere sight of food, an adaptive reflex that had evolved to ensure that the animal's digestive system was primed and ready for food subsequently entering the stomach; a phenomenon Pavlov termed a *psychic secretion.* In an experiment that has almost entered folklore, Pavlov demonstrated that a dog could "learn" that the sound of a bell signalled the impending arrival of food, prompting a salivatory reflex before the food itself was even within the animal's field of vision. In *classical conditioning*, or Pavlovian learning, the initially *neutral stimulus* (NS) of the bell, by virtue of its repeated pairing with the *unconditional stimulus* (US) of food, thus becomes a *conditional stimulus* (CS) able to evoke the *conditional response* (CR) of salivation in the absence of the food itself (Bolles, 1979). **Figure 2** summarises the basic Pavlovian learning situation, formally termed a *stimulus-response* (S-R) schedule.

Pavlov's findings were seized upon and extended by other early advocates of a behavioural stance in psychology, most notably by John Broadus Watson (1878-1958) who, as both the incumbent President of the American Psychological Association and an active investigator of animal learning himself, saw classical conditioning as a significant step forward in respect of the establishment of psychology as a scientific discipline. In one (in)famous experiment, Watson and Rayner (1920) transferred Pavlovian learning principles to the study of human emotional responses, succeeding in classically conditioning a white rat phobia in a small child, "Little Albert". Watson created a loud noise behind the child each time Rayner brought a rat into the child's field of vision, subsequent presentation of the rat evoking a startle response in the absence of the sound itself.

Moreover, Watson and Rayner observed that the child's fear transferred spontaneously to similar or associated stimuli, such as other small furry animals and even items of Rayner's clothing, a phenomenon Pavlov had termed *stimulus generalisation* when observing comparable effects in replications of his original salivation experiments employing differing tones of bell (Bolles, 1979).

Figure 2: Classical Conditioning of Stimulus-Response Associations



Watson was dismissed from his academic post shortly after the controversial "Little Albert" experiment, though ironically not for the nature of the experiment itself but for becoming romantically involved with Rosalie Rayner, something frowned upon far more than frightening children in American academe at that time. However, Watson immediately found gainful employment in the *J. Walter Thompson* advertising agency, rising to the post of Vice President in 1924 after employing classical conditioning principles in the design of hugely successful campaigns for products as diverse as *Pond's Cold Cream*, *Maxwell House Coffee* and *Johnson's Baby Powder.*

Watsonian techniques continue to exert influence in marketing to this day. In one long-running series of television commercials for *Andrex* toilet tissue in the UK, for instance, images of cute Labrador puppies (US) are repeatedly paired with the somewhat bland and functional product itself (CS) in an attempt to evoke the warm emotional responses associated with the puppies whenever the consumer subsequently encounters the *Andrex* product on supermarket shelves. The technique is also frequently employed in popular entertainment; in the 1970s movie *Jaws*, for example, director Steven Spielberg repeatedly paired a haunting piece of music with each appearance on-screen of a great white shark in such an effective manner that, by the end of the movie, the music alone was sufficient to elicit feelings of anxiety and apprehension in the viewing audience (Gorn, 1982). As Watson himself famously remarked: "*To ensure a reaction from the*

consumer, tell him something that will tie him up with fear, something that will stir up a mild rage, that will call out an affectionate or loving response, or strike at a deep psychological or habitual need" (Watson, cited in: Buckley, 1982:221).

On a general level, consumer researchers have sought to relate a number of key Pavlovian principles to more specific aspects of the marketing environment. For instance, a number of authors have suggested that the form of *stimulus generalisation* exhibited in Watson and Rayner's "Little Albert" experiment may explain the effectiveness of family branding techniques, whereby the appearance of a long-established product's logo on a product completely new to the manufacturer engenders perceptions of trust, loyalty, reassurance, etc., in consumers who have previous experience of that manufacturer's products (Arnould, Price, & Zinkhan, 2002). Similarly, the problem of credit card debt has been associated with the Pavlovian principle of *temporal contiguity*; Pavlov observed that weaker associations between stimuli are learned where the time-lag between presentation of the NS and the US is increased, sounding the bell more than 1 second before appearance of the food gradually diminishing the effectiveness of the bell as a reliable CS capable of evoking the salivatory reflex. In the case of excessive credit card spending, Feinberg (1986) has argued that the danger lies in the fact that the "pleasure of buying" and the "pain of paying" are separated in time by around thirty days, thus weakening the association between the two events in the mind of the consumer.

In terms of the consumer-situation transaction, then, classical conditioning provides one mechanism via which individuals learn an association between stimuli, whether those stimuli be two or more environmental factors (e.g. an established retailer opening a new store) or an environmental factor and an intrinsic emotional response (feelings of familiarity and reassurance upon seeing the retailer's fascia on that new store). Significant though such observations are, however, they nevertheless represent a partial account only; consumers do not simply recognise cues within the retail environment, they actively seek out such cues and/or respond to them by engaging in buying behaviour. Thus, whatever the status of classical conditioning as an explanatory framework, other learning processes must clearly also be intervening during the person-situation interaction.

Inspired by Pavlovs original work, the animal learning experiments conducted by Edward L. Thorndike (1874-1949) would reveal a second form of organism-environment conditioning that would advance the cause of behaviourism significantly. Thorndike constructed a crude laboratory apparatus known as a Puzzle Box, effectively just a simple cage whose door an imprisoned animal could nevertheless open by operating a latch in order to reach food left in view outside the cage. In a series of experiments, Thorndike observed that a cat placed in the Puzzle Box would initially discover that the latch would open the door more or less by accident. However, on subsequent encounters with the situation of being imprisoned in the Puzzle Box,

the time taken for the cat to operate the latch, escape and obtain access to food would gradually diminish in a gradated way, suggesting that *trial-and-error learning* was occurring. According to Thorndike, this decrease in escape time constituted an index of learning in the animal, a form of learning he termed *instrumental conditioning*; literally, the animal learns that its own actions are instrumental in the sequence of events leading to the consumption of food. This form of learning, in which the animal's actions become associated with a stimulus rather than just two stimuli becoming associated with each other, was formally expressed in Thorndike's *Law of Effect*, which states that the consequences of any action determine the likelihood of its repetition (Thorndike, 1911).

At this point, it is important to add a qualifier to Thorndike's own view of the Law of Effect as it is often misinterpreted within the literature, leading to a confusion of instrumental conditioning with other forms of learning. Just because the animal learns that its actions are associated with an outcome, this does *not* mean that Thorndike believed that the animal saw its own behaviour as actually triggering that outcome in any causal way. This was emphatically not Thorndike's view of instrumental conditioning at all. Supported by Watson, Thorndike argued strongly that this is still a form of stimulus-response learning, and not behaviour-outcome learning as it is so often interpreted; the animal's own behaviour merely becomes associated with all of those other stimuli present in the experimental situation, such as the sight of food and the environment of the Puzzle Box itself, in much the same way that the bell becomes associated with the arrival of food in Pavlovian conditioning. According to Thorndike, the animal has no understanding that it can actually obtain food by operating the door latch and escaping from the box – it is just aware that its bodily movements are a signal for subsequent access to food (Toates & Slack, 1990).

Both Thorndike and Watson were staunch advocates of a stimulus-response view of behaviour – including of human behaviour – and there was no room within that perspective on behaviour for internal mental events, such as an awareness that behaving in a particular manner would result in the obtainment of food. Within this conceptualisation of learning as an organism-environment moderator, which is staunchly objectivist, motor-reflexes merely become associated with outcomes through conditioning (Watson, 1913). It is this extreme view of behaviourism that has led critics to argue that individuals, whether human or non-human, are merely portrayed as passively-responding automata.

This perception of behaviourism is unfortunate because it has a tendency to transfer to all theorists subsequently working within that paradigm. Not all behaviourists dogmatically adhere to a rigid objectivist view of learning and, indeed, some of the most important advances in the understanding of organism-environment relationships have emerged from behaviourists willing to accommodate internal events within their explanatory schema, although such openness to

"mentalism" is often overlooked when evaluating their work today as a consequence of the Watsonian shadow.

This is certainly the case in respect of the work of Burrhus F. Skinner (1904-1990), who has contributed much to the development of the contextual stance and, indeed, whose views of the person-situation transaction are fundamental to much of what follows in the current thesis. Skinner is often portrayed as being an even more "extreme" behaviourist than Watson himself, a portrayal that is somewhat unwarranted if one engages with Skinner's writings at a deeper level than is typically presented in superficial texts on the school of behaviourism.

In part, the misinterpretation of Skinner is perhaps due to the nature of his early investigations of the behaviour-environment relationship, which owe much to Thorndike in respect of their methodology. Indeed, Skinner's initial foray into experimental design was driven by a belief that simply waiting for cats to escape from a Puzzle Box was an inefficient use of the researcher's time. As a consequence, Skinner developed his own "automated" version of the Thorndike apparatus; in the Operant Chamber (or "Skinner Box"), an animal must learn to press a lever, rather than operate a door latch, the result of that lever-pressing action typically being the delivery of food pellets into the chamber itself. By incorporating a simple paper-and-pencil recording device into the chamber's design, Skinner was able to "leave the animal to it" and take the recorded number of lever-presses within a set timeframe as an index of the extent to which the animal had learned that its actions resulted in the attainment of a food reward.

Because of the similarity in apparatus, there is a tendency to confuse the form of learning Skinner was investigating with the earlier work of Thorndike and, in fact, there is a general trend within the literature to regard Thorndike's term *instrumental conditioning* as being interchangeable with Skinner's own formulation. However, despite appearances, the two modes of learning are conceptually distinct.

Thorndike coined the term *reinforcement* to denote the capacity of a favourable outcome (e.g. obtaining food) to strengthen the learned association between the animal's own motor-actions and other associated stimuli which, taken in aggregate, are instrumental in achieving that outcome. However, whereas Thorndike did not accept that the animal was in anyway learning causation during the initial trial-and-error process, Skinner effectively redefined the meaning of the Law of Effect by arguing that, rather than learning a series of stimulus-response associations, animals in fact learn *behaviour-outcome* associations of varying types.

Thus, in Skinner's reformulation of conditioning, the organism learns that an action it performs (termed an *operant*) will have reinforcing *consequences*. Moreover, in Skinnerian *operant conditioning*, the outcome of that behaviour may be either positively reinforcing, and therefore more likely to

be repeated in future, or else it may be aversive or negatively reinforcing, and thus less likely to be replicated. In other words, the organism (animal, human) learns that its actions have consequences, which may be either positive or negative, and that the reinforcing properties of the outcome determine the extent to which those actions may be more or less likely to be repeated in identical or similar situations in the future (Mowrer, 1960).

In *The Selfish Gene*, Dawkins expresses operant learning in evolutionary terms as a fundamental survival programme that directs the organism to adapt its behaviour iteratively in response to the rewarding or punishing consequences of its own actions within the environment, thus (Dawkins, 1976:57):

> *"Here is a list of things defined as rewarding: sweet taste in the mouth, orgasm, mild temperature, smiling child. And here is a list of nasty things: various sorts of pain, nausea, empty stomach, screaming child. If you should happen to do something that is followed by one of the nasty things, don't do it again, but on the other hand repeat anything that is followed by one of the nice things."*

In operant learning, then, an organism (fish, laboratory rat, human consumer) performs an operation (or *operant*) within its current environment. If the outcome (the *reward*) is favourable, the operation may be repeated with a greater frequency; *positive reinforcement.* If, on the other hand, the outcome of that operation is unfavourable (i.e. *aversive,* rather than rewarding) it is less likely that the organism will repeat that operation again; *negative reinforcement* (Watson, 1913). Taken in sum, learning is thus a process of behavioural adaptation that is inherently evolutionary in character, the operant conditioning mode of that learning providing a viable mechanism via which each encounter with environmental events serves to inform and shape future encounters with such events in a phenotypic manner.

Brands of Behaviourism

Although Skinner's formulation of the operant conditioning process was derived on the basis of observations of animal learning in the operant laboratory, the notion that actions have consequences that may be either positively or negatively reinforcing has quite obvious implications for the analysis of human behaviour patterns also. A consumer visiting a new supermarket and being impressed by its low prices, relative to previous experiences of other supermarkets, may change her behaviour and patronise that new supermarket regularly in the future; that is, her behaviour changes as a result of *positive reinforcement.* On the other hand, if the consumer visits that new store and avoids it in future, perhaps due to higher prices and/or

inferior levels of services, then she may be said to have changed her behaviour as a consequence of *negative reinforcement.*

Skinner's formulation of behaviourism is particularly useful in that it overcomes some of the limitations of previous conceptualisations. As noted earlier, Watson and Thorndike were both staunch advocates of a stimulus-response view of learning in all species, including humans, and explicitly excluded private mental events as a valid focus of inquiry. Their formulation of behaviourism is often referred to as *methodological behaviourism* because they believed that the focus of research attention should be solely upon public behaviours that may be observed and measured in an objective manner. This is not necessarily to say that they rejected "mentalism"; it is just that they did not believe that it had a place within a scientific psychology because the data required lay within the individual and could only be accessed via a degree of introspection of the type they so despised from Freud and the psychodynamic school (Toates & Slack, 1990).

All forms of behaviourism are first and foremost a reaction against mentalism, seen by behaviourists as an orientation to psychology that attributes the causes of behaviour to internal processes, events or states that operate in some "other dimension", necessitating recourse to subjective introspection in order to elicit their true nature – a strategy seen by Watson and his contemporaries as inherently flawed because it is not objectively verifiable and, as a consequence, the "truth" can never actually be known. In an attempt to circumvent such weaknesses, Watson's methodological behaviourism seeks to confine the "science" of psychology to investigation of events that can be objectively and independently verified, such as the behaviour of the organism in its environment. Thus, in methodological behaviourism, behaviour is seen as the sole focus of psychology and that behaviour must be capable of being co-independently observed and measured, empirical data serving as a means of establishing objectivity. Moreover, in methodological behaviourism, scientific method is regarded as the only way to develop explanations for behaviour, explanations being generated via the hypothetico-deductive method and the deriving of testable hypotheses amenable to controlled experimentation and a generalisation of the results to the broader population on the basis of inferential statistical techniques. In other words, Watson's methodological behaviourism is firmly rooted in the philosophical tradition of logical positivism, as espoused by scholars such as Schlick, Hempel, Kraft, Carnap and Waismann (see: Merton, 1973; Zuckerman, 1998).

Although typically portrayed as operating within the same philosophical domain as Watson, Skinner's acceptance of logical positivism and the hypothetico-deductive method was, actually, little more than a passing indulgence. In his own doctoral thesis at Harvard in the late 1920s, for instance, an entirely theoretical piece of work, Skinner had already begun to draw upon the philosophical tradition of pragmatism and Mach's more functional model of positivism (Mach, 1893/1974) as a basis for what would gradually evolve into his own *radical behaviourist* philosophy.

What would emerge from this synthesis was, in fact, a far more economical and expedient view of science and of its ontology and epistemology. (Malone & Cruchon, 2001).

On the one hand, Skinner shared Watson's conviction that a scientific psychology should concern itself purely with public and observable acts of behaviour and that that behaviour was a legitimate field of study in its own right. Where Skinner departed from Watson, however, was in his views on the role of theory within that scientific psychology and its relationship to the pursuit of explanation. Watson and his contemporaries initially attributed the causes of behaviour to a series of conditioned associations between a stimulus (S) and a response (R), but gradually came to recognise that many aspects of the human condition (e.g. events within the body, such as emotion and pain) could not easily be explained without response to the intervening effects of the organism (O); a realisation that led to the subsequent formulation of a stimulus-organism-response view of behaviour (S-O-R). The problem for the methodological behaviourists, however, was that accommodation of the intervening organismic effects at first appeared to necessitate precisely that reliance upon introspection and mentalism that they so despised of the psychodynamic tradition. Hence, the increasing dependence upon theory – inner events could be conceptualised as theoretical constructs, hypotheses being generated on the basis of those constructs for inferential testing via experimental means.

Skinner was deeply critical of the Watsonian use of theories as hypothesis-generating devices for he believed that they often acquired the status of what he termed "explanatory fictions"; that is, if hypotheses derived from a theoretical construct were repeatedly verified, then it was inferred that the construct in question actually existed and was a valid cause of the behaviour under investigation, even though the reality may well be that it was little more than a "mentalistic" idea existing within the minds of the scientists investigating it (Skinner, 1974, 1981). In other words, Skinner came to regard theories as existing in precisely that "other dimension" that the anti-mentalism at the heart of the behaviourist paradigm was supposed to eliminate the need for.

This is not to say that Skinner was opposed to theorising per se. He simply believed that theories should take the form of causal explanations of functional relationships between observable behaviours and the environmental events upon which they were contingent. In Skinnerian radical behaviourism, *the purpose of a scientific psychology is simply to predict and control behaviour*, explanation serving as a tool to that end that should not be constrained by rigid adherence to some theoretical model that may stifle curiosity and discourage scientists from inquiry. For the radical behaviourist, although there is a recognition that general laws may emerge from repeated and independent observations of the person-environment interaction under similar or identical conditions, the identification of such laws must *not* be allowed to become the sole focus of psychology and risk impeding behavioural prediction and control. Put another way, the science of psychology as Skinner saw it should seek to understand and explain the organism-environment

contingency purely in functional terms and not seek to generalise the results observed to other organisms and other environments through inferential statistical procedures.

What emerges from the Skinnerian philosophical position is a view of science and of psychological research that is subtly different from the logical positivist stance advocated by Watson. In methodological behaviourism, the goal had become to develop theoretical models of the intervening effects of the organism in stimulus-response relationships, hypothesis-testing and inferential statistical analysis serving as a means of validating those theoretical models within the population from which an experimental sample had been drawn. By contrast, in Skinner's radical behaviourism, the objective was merely to offer an account of behaviour in terms of its interdependent relationship with the environment within which it occurred, and to apply that account in predicting and controlling the said behaviour without recourse to mentalism – including mentalism on the part of the scientist him/herself.

To illustrate this distinction within a marketing context, consider the proposed relationship between type of background music played in a retail store and the time consumers spend in that store, slower music typically being observed to encourage more prolonged browsing (Kotler, 1973). A consumer behaviourist adopting a Watsonian approach to the investigation of this effect would probably consult an appropriate body of theory (e.g. environmental psychology), generate a hypothesis summarising the proposed relationship between the independent variable (music) and the dependent variable (time in store), then analyse the resultant data with an inferential statistical test in order to determine the probability that any observed effects among the sample studied were indicative of how the wider population of consumers would be likely to behave. By contrast, a Skinnerian researcher exploring the same phenomenon would be more likely to experiment with different forms of music, obtain measurements of time spent in the retail store and then deduce the optimal form of music producing the desired effect upon the consumers being observed, that optimal music being applied in subsequent stores in an attempt to control the behaviour of other consumers. Of course, if that music is repeatedly observed to produce the exact same effect in many different stores over time, some general law may be inferred, but this would *not* be the ultimate aim of the research; rather, the goal throughout would be to simply better predict and control consumer behaviour and, if future applications of the music were found not to produce the desired effect under certain environmental circumstances (e.g. in a store aimed at totally different age group, in a store with radically different décor, etc.) then the music management strategy may have to be revised. In other words, the Skinnerian approach to inquiry does not presuppose that consumer behaviour can be statistically inferred from a sample, but instead demands repeated observation and amendment of the marketing strategy as appropriate.

The radical behaviourist view of science, then, is one of exploration and inquiry, not theory construction and validation. It seeks to offer an account of actual emitted behaviour-environment relationships that have been objectively observed and verified, rather than to construct theoretical models and accompanying hypotheses that may constrain inquiry and scientific exploration.

There is, however, a final distinguishing characteristic of radical behaviourist philosophy that has important *empirical* implications of direct relevance to the present thesis. Methodological behaviourists such as Watson adopted a "hardcore" view of psychology as a scientific discipline, regarding that psychology as an experimental research endeavour akin to physics, chemistry or any other natural science. Experimental control and manipulation was paramount, only publicly observable acts of behaviour that could be independently verified and directly measured being deemed worthy of investigation. In formulating his radical behaviourist stance, Skinner also acknowledged that psychology was a scientific discipline, that experimentation was the preferred methodology and only behaviour that could be independently observed and verified should be the focus of empirical study. Nevertheless, there were also two important qualifiers in Skinner's own particular view of the nature and form a "scientific psychology" should take that have significant methodological implications.

In particular, Skinner's first qualifier to the general "laws" of behaviourism is that he does not necessarily reject internal events as valid foci of psychological inquiry but, rather, he seeks to redefine them as forms of behaviour. That is, internal "activities" such as thinking and reasoning are not necessarily regarded as "private" and "mentalistic" and thus excluded from the attentions of psychology. The crucial criterion for inclusion, from a Skinnerian perspective, is whether those activities can be classified as "public" via independent observation and verification. Under certain circumstances, Skinner believed that internal behaviours such as thinking *can* be regarded as publicly verifiable in situations where, for instance, they can be demonstrated as exerting manifest control over behaviour and/or constituting a part of the functional causal explanation.

Consider the example of the so-called *availability bias*, first identified by Kahnemen and Tversky (1982), whereby recent exposure to a phenomenon exerts a capacity to "skew" perceptions of that phenomenon. In a study of players of the UK National Lottery, Griffiths (1997) observed a significant negative correlation between an individual's level of exposure to publicity surrounding recent large wins and the statistical probability (s)he associates with winning; i.e. the more publicity a person has seen relating to large "jackpots wins", the more (s)he tends to underestimate the "odds" of winning the jackpot him/herself. From a cognitivist stance, given that the brain is construed as a computer system with a finite processing capacity, Griffiths suggests that this availability bias is a *cognitive heuristic*, a "rule of thumb" the individual uses to reduce the information-processing activities (s)he must perform when trying to determine

whether or not it is worth buying a lottery ticket. From a radical behaviourist perspective, of course, an alternative explanation for the availability bias is also possible in that it may simply represent a generalised conditioned expectancy, based on prior experience, that recent events are reliable cues in predicting reinforcement outcomes; e.g. after trying several "own brand" products in a supermarket and finding the quality of those products acceptable, the consumer begins to use that own brand label as a conditioned "signal" of quality in the selection of other products within the supermarket's range. Whatever the nature of the availability bias, however, the key point here is that it *is* possible to demonstrate that an individual consumer is relying upon recent events to make a choice if correlations such as that between lottery publicity and estimated odds can be independently observed. In other words, the availability heuristic is an internal event, but it is also a *public* event as it can be demonstrated as forming part of the causal explanation of an observable behavioural outcome.

In Skinner's radical behaviourism, then, there is an acceptance of internal events as legitimate phenomena for behaviourists to examine. Skinner believed that the fact that mental events, such as "thinking" and "deciding", were occurring within the individual did not *de facto* mean that they were necessarily private; in fact, if they could be demonstrated as exerting influence upon behaviour at a given moment in time, they were clearly still public acts and could thus be included within a scientific frame of analysis. Put another way, Skinner's contribution was to recognise that internal acts such as "thinking" and "deciding" at times constituted *behaviours in their own right.* Therefore, although the task of observing and measuring them without recourse to introspection may be more difficult, they were nevertheless behaviours that were as valid a subject for psychological investigation as more obvious psychomotor behaviours such as picking up a pen, having sexual intercourse or walking the dog (Skinner, 1974).

Following on from the above, Skinner's second major amendment to Watsonian behaviourism lay in the fact that he also recognised that humans are distinct from other species in that they have a capacity for language, which he similarly redefined as *verbal behaviour.* In radical behaviourism, verbal behaviour is therefore seen as being as amenable to analysis as any other form of operant behaviour, given that the language an individual uses can often have a powerful reinforcing effect upon others. Moreover, language also affords an opportunity for humans to engage in *rule-governed behaviour*, a form of learning that helps accommodate within the behavioural perspective aspects of the socio-cultural environment as diverse as the effects of legislative frameworks, social codes, moral values, religion and ritualism, taboos, and, more immediately relevant perhaps, the advice and opinions of others. Indeed, as Skinner himself observed, the majority of individuals do not need to experience negative reinforcement to know that they must avoid consuming a poisonous substance such as arsenic; they are happy to accept the "wisdom" of others, rather than taking the arsenic and having to learn the hard way (Skinner, 1957). In

other words, the verbal behaviour of others (e.g. advice not to take arsenic) can potentially have as reinforcing an effect upon a person as direct experience of an event. Thus, just because a consumer has stopped using Internet shopping services, this does not necessarily mean that she has had a negative experience of purchasing goods via that medium herself – it may simply be the case that a friend or relative has had such an experience and the "horror story" that person has recounted via verbal behaviour has had a potent negatively reinforcing effect upon her; i.e. it has resulted in the acquisition of a rule that states that the Internet is an unreliable and untrustworthy environment within which to shop.

Skinner's re-conceptualisation of behaviourism to accommodate internal behaviour, verbal behaviour and the acquisition of rules is hugely significant because it renders it a far more powerful explanatory framework with which to study humans than other forms of behaviourism whilst, at the same time, avoiding the unnecessary complications that cognitive-social learning theorists often resort to in seeking to construct uneasy marriages between cognitive psychology and traditional behaviourism (e.g. Bandura, 1986, 1995; Rotter, 1981; Schnake & Dumler, 1990; Spiegler & Weiland, 1976). Indeed, it is this extension of behaviourism to incorporate internal and verbal acts that is the origin of the descriptor *radical* behaviourism; that is, *radical behaviourism is only radical relative to other forms of behaviourism.* Thus, although Skinner is often misrepresented as being within the same "anti-mentalism" conceptual domain as Watson and Thorndike, the fact is that he formulated a far more parsimonious and accommodating brand of behaviourism than his contemporaries (Bolles, 1979).

According to Skinner, then, internal events that are publicly observable, together with the species-specific capacity that is verbal behaviour, may constitute integral components of a causal explanation of a behaviour – albeit a component of that explanation that requires a degree of *interpretation*, being less amenable to more overt forms of measurement as would a rat pressing a lever or a consumer repeatedly purchasing the same brand of baked beans. This particular point is crucial. In both of the above Skinnerian qualifiers to the traditional methodological behaviourist standpoint, interpretation is seen as a valid and – most importantly of all – as a *scientific* approach to the identification of a causal explanation of behaviour, provided that it is based upon objective co-observation of external events without recourse to introspection.

This radical behaviourist acceptance of interpretation is symptomatic of the broader view of scientific investigation Skinner advocated. Whilst believing strongly that the experimental method was the preferred mode of inquiry for psychologists to adopt, Skinner nevertheless recognised that much of human behaviour was simply not amenable to the rigid form of laboratory-based experimentation associated with studies of animal behaviour within the operant chamber and, as a consequence, required a more ecological mode of investigation undertaken within the environmental contexts within which it occurred. Moreover, given the greater human

propensity for internal behaviours to be nevertheless rendered public, and the innate species-specific capacity for verbal behaviour, the practical implementation of a Skinnerian approach to explanation may, at times, necessitate a degree of interpretation on the part of the investigator in order to more effectively facilitate the construction of causal explanations and achieve a higher level of behavioural prediction and control (Delprato & Midgley, 1992; Malone & Cruchon, 2001; Skinner, 1974).

Of course, at first glance, Skinner's suggestion that it is simultaneously possible to be scientific *and* engage in interpretation can often be greeted with incredulity by social scientists of all persuasions, be they quantitative or qualitative in inclination, or positivist or critical theorists in their philosophy. Science is seen as inherently positivist, and therefore quantitative, whilst interpretive research is more commonly associated with qualitative empirical strategies derived from philosophical standpoints as diverse as critical relativism, postmodernism and grounded theory. Indeed, it is generally the case that positivism and interpretivism are typically regarded as bipolar constructs (Cresswell, 1994; C. Goulding, 1999). However, even if one accepts the basic premise that positivism and interpretivism are the opposing poles of a continuum, then surely there must by definition be some intermediate point along that continuum at which the boundaries between the two polar extremities merge and "compromise" positions become possible? (Hirschman & Holbrook, 1986; Ozanne & Hudson, 1989). It is at this hypothesised intermediate point that radical behaviourist philosophy, together with its accompanying methodological strategies, thus seeks to position itself via the accommodation within a scientific psychology of interpretive research techniques within a still inherently positivist paradigm – in effect, a "science of interpretation" which, within a marketing context, can therefore be regarded as offering a positivist contribution to the current "interpretive turn" in mainstream consumer research (Foxall, 1995b; Szmigin & Foxall, 2000).

Consumer Choice as an Operant Process

In terms of understanding the nature of the individual-environment relationship, Skinner's radical behaviourist formulation is significant because it immediately presents itself as a potential mechanism via which learning may serve to moderate the person-situation transaction. By way of illustration, in the earlier example of the consumer visiting an unfamiliar new supermarket, that consumer encounters a series of environmental stimuli that may be either positively or negatively reinforcing (pricing levels, standards of service, etc.). She also brings to that situation a series of person-bound factors that serve as referents (opinions of friends who have already visited the store, previous experiences of other supermarkets' pricing levels and service standards, etc.). Thus, as a result of the interaction between these two distinct sets of variables, extrinsic

environmental factors and the consumer's own intrinsic experiences of previous environments of a similar nature, her behaviour toward that new supermarket is modified for the future; i.e. learning occurs. In short, person-bound and environmental factors interact within the shopping situation, the outcome of that interaction shaping the consumer's future behaviour toward the retailer in an iterative manner.

Overall, the behaviourist learning paradigm represents a potential explanatory framework with which to understand consumer behaviour within retail environments, be those environments physical or virtual in nature, particularly when applied at the situational level of analysis. Classical conditioning offers an account of the ways in which stimuli within the shopping situation may acquire a certain degree of saliency to the individual consumer depending upon the manner in which they are presented, a process particularly useful in understanding consumer emotional responses to retail phenomenon such as products and brands. Similarly, the behaviour-outcome and rule-governed associations acquired via Skinnerian operant conditioning shed light upon the manner in which current experiences of retail shopping situations may determine the shape of future ones, as in the use of retailer loyalty and reward schemes to encourage continued patronage of a store or, alternatively, the manner in which an unfortunate negative service encounter may discourage subsequent consumer patronage of that store in a particularly potent way.

There is no reason to expect that these learned situational associations should be confined to traditional physical retail environments only. Indeed, operant learning may well be crucial in determining the success or otherwise of early encounters with emergent shopping media. If a consumer making her first online purchase has a positive shopping experience, she may be more likely to procure goods and services via that medium again in the future. If, however, the outcome of that initial channel usage episode is a negative one, she may avoid online shopping services for some time to come. Thus, in respect of the present research programme and its stated objective of seeking to understand consumer behaviour within multiple retail environments, together with those factors determining selection, use and integration of available purchase channels, adoption of a behaviourist perspective may well prove fruitful, the operant formulation in particular representing a viable explanatory framework within which to describe and analyse everyday experiences of shopping at the physical-virtual interface in an iterative manner.

Ever since Watson's successful transition from respected academic to advertising guru, consumer researchers, marketers and behavioural economists have sought to apply operant learning principles in the study of buying behaviour and situational determinants of retail choice, application of a radical behaviourist approach in particular becoming a focus of renewed intellectual and empirical vigour in recent years (e.g. Bauman, 1991; Berry & Kunkel, 1970;

Foxall, 2003; Hernstein, 1958; Lea, 1978; Leek, Maddock, & Foxall, 2000; Madden, Bickel, & Jacobs, 2000; Nord & Peter, 1980b; Peter & Nord, 1982; Rothschild & Gaidis, 1981; Zeiler, 1999). In the main, however, published outputs in this area have tended to emphasise the operant learning aspects of behaviourism more than the situational dimension, with minimal attention being paid to the transactional relationship between person and situation. Indeed, to date, only one comprehensive explanatory framework has been proposed within the consumer research literature that seeks to accommodate the person-situation interaction within the emergent contextual stance in the social sciences; the *Behavioural Perspective Model* (BPM) of purchase and consumption (Foxall, 1986, 1993a, 1999a).

Based at the University of Cardiff in the UK, the BPM Research Programme, from which the BPM explanatory framework itself emerged, is very much located within the general Skinnerian stance that the goal of behaviourism is to serve as an investigative "technology", rather than as a theory from which to generate testable hypotheses per se, and construct a situated account of consumer behaviour via objective observation, measurement and interpretation; i.e. the BPM is an example of what Skinner himself termed an *applied behaviour analysis* (Skinner, 1974). Moreover, the BPM is evolutionary in its emphasis, founded upon the Skinnerian assumption that the person is, first and foremost, an organism; a member of a species whose physiology has been shaped by natural and sexual selection pressures, and whose individual behaviour, in turn, is similarly shaped across the lifespan in an iterative manner during its transactional encounters with environmental events and stimuli (Foxall, 1994; Skinner, 1981).

Conceptually, the BPM framework begins from the Skinnerian premise that, at any point in space and time, the behaviour of an individual organism is under the control of its current setting by virtue of its own unique ontogenic history of reinforcement contingencies; that is, the individual is endowed with a particular repertoire of past experiences of behaviours and their consequences which, in the current setting, guide behaviour in response to some specific set of environmental prompts (or *discriminative stimuli*). Typically, radical behaviourists express this process in the form of the *three-term contingency*, thus:

$$S^D \rightarrow R \rightarrow S^{R/A}$$

In the above, $\mathbf{S^D}$ is the discriminative stimulus, **R** is the response of the organism, and $\mathbf{S^{R/A}}$ is the reinforcing or aversive consequences of that response. Thus, in any given situation, the individual endeavours to respond in such a way as to achieve positive reinforcement or, at very least, to avoid negative reinforcement (aversive consequences). As a result of prior experiences of such situations, or of similar situations, the individual has "learned" to rely upon certain situational cues (discriminative stimuli) in order to try to predict which form of reinforcement may be forthcoming as a consequence of potential available responses. This is not to say the

discriminative stimuli *cause* a particular response; rather, they merely serve as signals to guide the organism's selection of a response. What factors within the situation may serve as effective discriminative stimuli is therefore highly idiosyncratic and based upon past experience (Delprato & Midgley, 1992).

To illustrate the three-term contingency in operation within a retail purchase situation, consider the example of a consumer who, unfamiliar with computer games, is interested in buying a games console as a birthday gift for his daughter, but finds himself confronting a number of available options within an electronics store. Making the correct choice would be highly reinforcing, providing hours of pleasure for his daughter and, in turn, confirming his status as an effective father. On the other hand, an unwise purchase may lead to aversive consequences; in particular, the disappointment of his daughter. In the absence of any direct prior experience of purchasing a games console, and with no other cues available to guide selection, the consumer may nevertheless still rely upon his own unique learning history in order to make a choice.

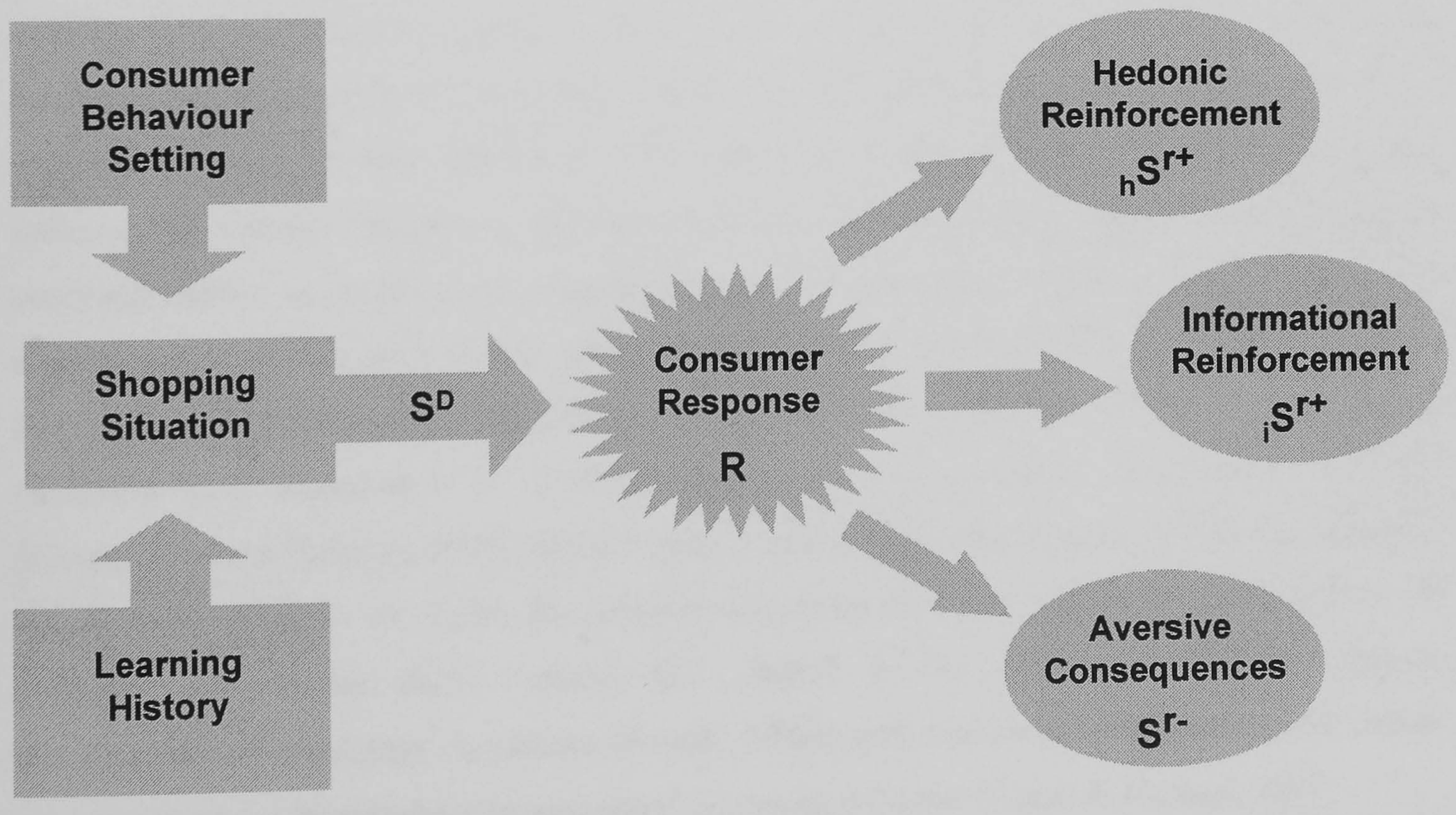
Suppose that there are two main contenders; the *Sony Playstation* and the *Microsoft X-Box*. Our consumer is very happy with previous *Sony* products he has purchased in the past, but is less than satisfied with the reliability and stability of his PC's operating system, manufactured by *Microsoft*. Thus, in this particular buying situation, the *Sony* and *Microsoft* brands serve as discriminative stimuli, prior experience of those brands directing the consumer toward purchase of a *Playstation* games console rather than an *X-Box*.

Of course, the hypothetical instance of a consumer selecting a games console purely on the basis of brand name is a gross over-simplification, presented more by way of illustration than explanation. In an actual buying situation of this nature, a number of potential co-varying discriminative stimuli may also be vying to exert influence over the purchase decision; there may be a large difference in price between the two brands, for instance, or the advice of a shopping companion or sales assistant may prove particularly persuasive. Which stimuli are the most and least salient, however, will depend upon the individual consumer's prior experiences of identical or similar situations. Perhaps the consumer does not wish to purchase the *Sony* console because it is more expensive and he is on a limited budget, overcoming his prejudices and purchasing the less expensive *Microsoft* option instead allowing him to conserve resources to spend on his daughter's accompanying party, an event he knows has always been a highlight of her birthdays in the past. Alternatively, it may simply be the case that the particular companion accompanying the consumer has given wise advice during previous shopping episodes, making him more likely to be influenced by his or her views on subsequent occasions such as this.

It is important to emphasise, however, that the BPM explanation of this shopping episode does *not* seek recourse to accommodating consumer information-processing activities within the

account of the product choice process. Radical behaviourists do not deny that such 'mental' behaviours are engaged in, they simply argue that it is unnecessary to regard such activities as being in any way causal; the consumer's selection of a *Playstation* console rather than an *X-Box* can be explained purely in terms of the available discriminative stimuli and the saliency they hold for the consumer as a consequence of past experience. Put another way, the focus of attention is on the transactional relationship between situational stimuli and the consumer's learning history. Even if some form of computational behaviour *is* involved in evaluating the discriminative stimuli, as a cognitive consumer psychology would no doubt contend, analysis of that cognitive behaviour is not necessary as situational stimuli and prior experiences of them remain the primary determinants of the decision outcome. For radical behaviourists, intermediate information-processing activities are simply "mental way-stations" in the interaction between person and situation (Skinner, 1963) The BPM account is thus a complementary explanatory framework, serving to direct attention toward identification and analysis of the key variables in the consumer decision-making process, rather than toward the various stages in the decision-making process itself; a far more practical focus of research attention, given that it is those person-situation aspects of the choice process that are often most under the marketer's direct or indirect control (Nicholson et al., 2002; Troye, 1985).

Figure 3: The Behavioural Perspective Model (after: Foxall, 2003)



As a starting point for a more detailed discussion of the BPM's core components, it may be useful to begin by briefly summarising the process depicted in **Figure 3**, above, by reference to the earlier example of a consumer choosing a computer games console as a gift for his daughter's birthday.

At the centre of the above diagram is the actual choice *behaviour* itself. To the left of this, the *consumer behaviour setting* is the retail store in which the consumer is selecting a games console and the *learning history* is the consumer's unique repertoire of previous experiences of similar choice situations. The intersection is the *shopping situation*, representing the particular shopping episode that occurs when the consumer learning history is brought to bare upon this particular behaviour setting, the contingencies of past behaviour-outcome experiences in the former guiding identification of discriminative stimuli in the latter to generate the behavioural response (i.e. buying the games console). Finally, to the right of the diagram, three potential outcomes of that response are identified; *hedonic* and *informational* reinforcement are positive outcomes, relating to the selection of an appropriate product and the consumer's own performance in this task respectively, any likely negative outcomes similarly being depicted as *aversive consequences*. All three reinforcement outcomes then feed back into the consumer's learning history, forming part of that repository of behaviour-outcome contingencies that will serve to guide and shape responses to similar situations in the future (Foxall, 1999a).

This skeletal framework conforms to the classic Skinnerian three-term contingency: discriminative stimuli ($\mathbf{S^D}$) are located within the behaviour setting; the behaviour is the consumer's actual situation-specific response (**R**); and the three potential outcomes, which feedback into the consumer's learning history, are the reinforcing consequences ($\mathbf{S^{R/A}}$), here depicted in terms of their positive-hedonic ($_{h}\mathbf{S^{r+}}$), positive-informational ($_{i}\mathbf{S^{r+}}$) and negative-aversive ($\mathbf{S^{r-}}$) values. Moreover, the framework has been effectively employed in a range of empirical studies in recent years, exploring aspects of consumer behaviour as diverse as: the interpretation of consumer choice scope (Foxall, 1999a); in-store behaviour within the retail fashion sector (Newman & Foxall, 2003); consumer emotional responses to aspects of the service encounter (G.R. Foxall & G.E. Greenley, 1999); situational influences on consumer attitudes (Foxall & Yani-de-Soriano, 2004); brand loyalty (Foxall, 2003); determinants of fish purchase and consumption (Leek et al., 2000); the affective responses of Latin American consumers to the shopping environment (M.Y. Soriano, G.R. Foxall, & G.J. Pearson, 2002); the operant interpretation of marketers' behaviour (Foxall, 1998a); and consumer satisfaction levels within the context of the Birmingham International Convention Centre (Foxall & Hackett, 1994).

A particular problem with the BPM framework, however, lies in the fact that the terminology used and the actual structure of its accompanying schematic representation has a tendency to vary subtly from paper to paper, making a "definitive" version difficult to identify within the

extant literature; what is presented above is, in fact, a composite version of the framework based upon the most common definitions of the components available. On the one hand, this tendency toward subtle variation may be interpreted as evidence of a lack of conceptual clarity on the part of the principal author of the model, Gordon R. Foxall. By way of qualification, however, it should be noted that: (1) the BPM is an emergent framework and, as such, is likely to be subject to revision from time-to-time in light of empirical data accrued; and (2) in any event, the BPM is intended as a *framework* with which to engage in a radical behaviourist interpretation of consumption, not as an over-arching *theoretical model.*

Indeed, in respect of this latter point, it will be recalled that Skinner himself was very much opposed to "grand theorising" within the social sciences, believing that it at times served as a constraining influence upon progress, contemplation of hypotheticals in order to generate testable experimental hypotheses often being at the expense of a scientific *exploration* of behaviours from which the *discovery* of general laws may follow (Skinner, 1974). Thus, from a Skinnerian perspective, it *is* permissible to refine and adapt the basic behaviourist technology to make it more applicable to the current exploratory research activity; something Foxall and his colleagues are, in fact, attempting to do in their adaptations of the BPM tool to suit current research demands whilst, at the same time, retaining the underlying principle of the three-term contingency.

Contingencies of Reinforcement

The BPM framework, then, offers a potential explanatory tool for the investigation of consumer choice within the broader explanatory stance of the person-situation transaction, conforming to the basic three-term contingency at the heart of the Skinnerian approach to behavioural analysis. In order to render the following discussion of the model's key elements more accessible, it may be useful to loosely frame that discussion around the key components of the three-term contingency individually; i.e. the availability and form of discriminative stimuli ($\mathbf{S^D}$); the response of the consumer to such stimuli (**R**); and the reinforcing outcomes of that response ($\mathbf{S^{R/A}}$). Given that radical behaviourism presupposes that it is the contingency of reinforcement that is the primary factor instrumental in generation of an appropriate behavioural response, a suitable starting point might therefore be to consider the BPM depiction of the various reinforcement modes themselves.

The right-hand portion of **Figure 3**, above, depicts three Skinnerian reinforcement outcomes ($\mathbf{S^{R/A}}$). Recall that in the operant learning paradigm, reinforcement represents the consequences of a response being performed as experienced by the organism. Moreover, this reinforcement may take one of two fundamental classes: positive reinforcement, which makes the likelihood of

the response being performed again in future situations more likely, and negative reinforcement, in which the consequences decrease the likelihood that a response will be repeated (Schwartz, 1989).

The BPM framework has traditionally recognised that positive reinforcement may take one of two forms, a process known as bifurification. The term *informational reinforcement* is adopted to refer to the positive feedback the individual receives on his or her performance in the role of consumer. On one level, this may be explicitly informational in format, such as when a saver receives a statement from his or her bank indicating the amount of interest accrued during the previous financial period. Less explicitly, but no less reinforcing, informational reinforcement may also be received via the verbal behaviour of a third party; for instance, where a consumer is unsure as to whether a new skirt suits her, but the wisdom of the purchase is confirmed when complements are received from her partner.

In recent applications of the framework, the second category of positive reinforcement has sometimes been identified as *utilitarian reinforcement*, denoting the positive benefits the consumer receives from the purchase, consumption and eventual disposal of goods and services, the emphasis being firmly upon the functional and economic aspects of that process; a notion derived from the concept of utility in orthodox microeconomic theory (e.g. Foxall, 1999a). In earlier formulations of the framework, however, the term *hedonic reinforcement* was employed instead, encompassing less overtly economic outcomes of the behavioural response also, such as the degree of pleasure and satisfaction the individual derives from buying, owning and using goods (e.g. Foxall, 1994).

In this particular application of the BPM tool, the original label of hedonic reinforcement is favoured for two specific reasons: (1) the focus of the subsequent empirical phase of the thesis takes the retail apparel sector as its elected case study and, given that apparel purchasing can be either purely functional (e.g. routine replacement of underwear) or more overtly hedonic (e.g. a student buying a gown for her Graduation Ball), the original terminology would appear potentially more inclusive in its scope; and (2) related to this, the actual shopping medium itself may also vary in terms of its functional and hedonic appeal, some consumers simply deriving satisfaction from the convenience of, say, the Internet as a twenty-four-hour retail purchase channel, whilst other consumers may be more enthusiastic technophiles and thus derive considerable pleasure and satisfaction from the opportunity to procure goods via computer-mediated means.

In terms of negative reinforcement, the extant literature on the BPM framework has utilised the general term *aversive consequences* to classify those behavioural outcomes that decrease the likelihood that a response will be replicated in future situations. Such consequences may take the

form of actual negative outcomes of buying behaviour, as in the purchase of an inappropriate or defective product, or else they may simply relate to the fact that the consumer must part with money in order to obtain the goods or incur interest charges when purchasing goods on credit. However, both Watson (1913) and Skinner (1981) identified two subtly different forms of negative behavioural outcome: *negative reinforcement*, in which a response is performed in order to avoid an aversive situation (e.g. paying local taxes to avoid prosecution by the authorities); and *negative punishment*, in which the response itself leads to a negative experience (e.g. purchasing a sub-standard food product that makes the consumer ill) and/or to the removal of a positive experience (e.g. a purchase results in a consumer's credit card limit being reached and the withdrawal of credit facilities).

From the purposes of this thesis, the original BPM element of "aversive consequences" is retained in the interests of conceptual clarity/compatibility with the extant literature. However, there is a strong recognition throughout both the empirical and discursive chapters to follow that the range of potential negative outcomes of behaviour may well take the form of either reinforcement or punishment in Watsonian-Skinnerian terms. A consumer may visit a retailer's Web site simply to pay an overdue store-card account, for instance, and thus avoid additional interest charges, or else (s)he may engage in an unwise online transaction with a disreputable retailer and suffer a more direct financial loss.

Table 2: Schedules of Reinforcement (adapted from: Skinner, 1974)

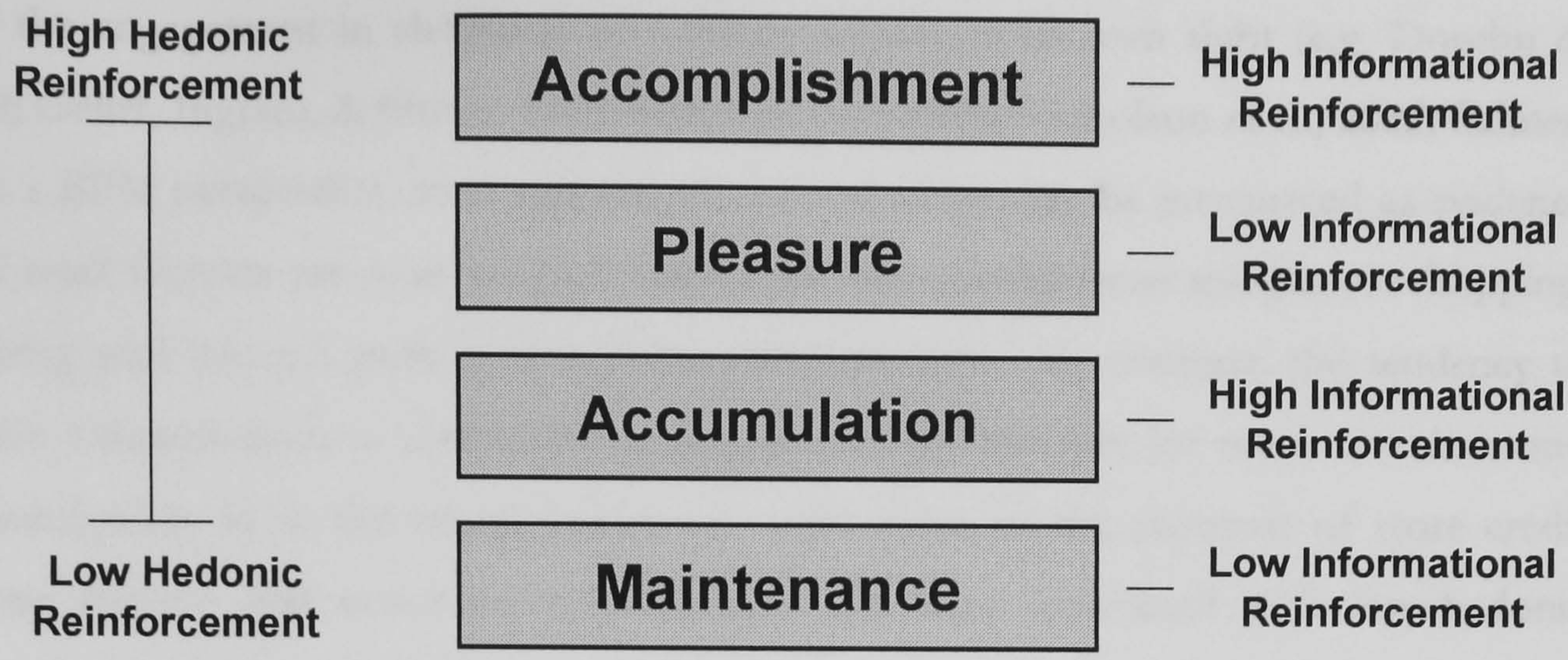
Reinforcement Schedule	Operational Definition	Consumer Behaviour Examples
Fixed Interval (FI)	The first response made after a set time period is reinforced	**1.** Paying cash for goods and removing them immediately from the store. **2.** Seeing savings' interest accrue on each month's bank statement.
Variable Interval (VI)	The time-lag between response and reinforcement varies around some average temporal value	**1.** Ordering goods by mail from a catalogue, but finding delivery times vary. **2.** Variations in speed of service within a favourite restaurant depending upon whether or not it is busy.
Fixed Ratio (FR)	The first response made after a given number of responses will be reinforced	**1.** Collecting a set number of tokens to receive a free gift. **2.** Receiving a fixed rate of interest on one's savings each month.
Variable Ratio (VR)	A varying number of responses are reinforced.	**1.** Unpredictable price reductions on regular products bought in the local supermarket. **2.** Occasional "bonus points" awarded on a retailer's loyalty card.

Whether positive or negative, however, reinforcement may actually arrive via a number of different routes. In particular, Skinner (1974) identified four distinct delivery formats, termed *reinforcement schedules*, delimited by the delay between response and reinforcement (termed the *interval*) and by the number of responses required for reinforcement to be forthcoming (termed the *ratio*). These four main reinforcement schedules are summarised in **Table 2** above, together with consumer behaviour examples to illustrate their applicability within a BPM context.

Whatever the nature of the reinforcement schedule, however, subsequent behaviour patterns are contingent upon prior response outcomes. Some reinforcement contingencies are directly experienced by the individual, as in the satisfaction derived from obtaining a "bargain" or the pleasure experienced when consuming a favourite chocolate bar; others are a product of verbal behaviour, such as where a new outfit attracts admiring comments from a friend, or else are rule-derived, as in the accumulation of tokens in order to obtain a "free gift". Within the BPM framework, this iterative effect of reinforcement outcomes is represented by means of the learning history, effectively constituting a cumulative repository of behaviour-outcome experiences. Thus, a more complete depiction of the BPM framework would include "feedback" arrows emanating from the three reinforcement outcomes back to the learning history in a constant loop. In order not to render the diagrams within this chapter too complex, these feedback loops have been excluded for the purposes of the present discussion. However, throughout the proceeding narrative, it is important to remember that behaviour is iterative and that *all* reinforcement outcomes feedback into the individual's learning history

On the basis of the above, it thus becomes possible to formulate the first research proposition of the current thesis. Within the BPM schema, *the primary purpose of purchase and consumption is the attainment of positive reinforcement.* The consumer enters a behaviour setting and immediately begins to interact with its principal characteristics, the individual consumer's learning history being brought to bear upon that behaviour setting in order to identify appropriate discriminatory stimuli as signals for available reinforcement outcomes. Put another way, the historically and spatially specific act of shopping that constitutes a shopping situation is a function of the application of a consumer's individual learning history upon a particular behaviour setting *in the pursuit of reinforcement.* On this basis, Foxall (1996; 1997c; 2003) has thus proposed that it is possible to construct a four-fold taxonomy of retail buying behaviours on the basis of the reinforcement outcomes they yield. **Figure 4**, below, depicts these four categories of buying behaviour, termed *operant behaviour classes* within the BPM literature, specific types of shopping being associated with the pursuit of particular patterns of behavioural reinforcement.

Figure 4: Operant Classes of Consumer Behaviour (after: Foxall, 1994)



In the above hierarchy, the lowest level class of operant behaviour involves *maintenance* shopping, the consumer acquiring basic needs only (food, shelter, etc.) and/or satisfying his/her minimal obligations to the current social system (e.g. paying taxes). Such behaviours are characterised by little hedonic reinforcement and are similarly devoid of informational reinforcement; indeed, in respect of the latter, it is often the case that negative reinforcement is in operation too, non-payment of taxes holding a potential to be punished. At the next level in the hierarchy, *accumulation* shopping is still characterised by relatively low levels of hedonic reinforcement, but informational reinforcement is more pronounced. Accumulation behaviours typically involve activities such as hire-purchase shopping, collecting, investment, savings, etc. For instance, in the case of a regular savings plan, monthly interest statements may serve to regularly reinforce the saving activity. Next, *pleasure* shopping is more indulgent, being high in hedonic reinforcement but low in informational reinforcement. Examples of pleasure shopping behaviours might include the consumption of popular entertainment products and services, such as buying a CD/DVD or subscribing to a pay-TV service. Finally, at the highest level in the operant behaviour hierarchy, accomplishment shopping maximises both hedonic and informational reinforcement forms. This class of behaviour typically involves all of those activities subsumed under the general heading of conspicuous consumption; not only does the consumer derive personal pleasure from such expenditure, (s)he also enjoys a degree of social and economic status as a result of a public consumption of high-status goods, brands, etc. Overall, both positive reinforcement forms are thus evident in all four categories, differing only in their magnitude along a high-low continuum.

On the basis of the above, it may be hypothesised that particular channels or channel combinations are associated with particular patterns of reinforcement, as manifest in the principle operant classes of behaviour associated with those channels or channel combinations. For instance, several recent studies have observed that, despite the growth in remote ordering,

traditional physical retail environments remain the preferred purchase context where consumers are indulging in hedonic shopping activities, such as the search for an outfit to wear for a special occasion or the engagement in shopping as a leisure activity in its own right (e.g. Donthu & Garcia, 1999; Gehrt, Ingram, & Howe, 1991; Gehrt & Yan, 2004; Nicholson et al., 2002; Palmer, 1997). From a BPM perspective, such patterns of channel usage may be interpreted as evidence that physical retail formats are more strongly associated with *accomplishment* and *pleasure* shopping, the overarching goal being a pursuit of hedonic reinforcement. By contrast, the tendency to favour remote channels such as mail-order catalogues and the Internet for more mundane and functional purchasing, as in the repeat buying of staple items or the payment of store credit accounts, may suggest that non-store retail formats are more associated with less hedonic *maintenance* and *accumulation* shopping activities, opportunities for positive reinforcement in general being fewer in such situations.

In other words, due to differentials in reinforcement opportunities/priorities, it is possible that particular retail formats are the preferred mode of purchase for particular categories of buying (Perottii, Sorce, & Widrick, 2003) – a possibility that may be expressed more formally, thus:

P_1: Different retail purchase channels are associated with different operant classes of consumer behaviour.

Repositories of Experience

A central tenet of the BPM is that consumer choice is the pursuit of reinforcement; specifically, it is simultaneously the maximisation of positive reinforcement and the minimisation of negative punishment. Moreover, the reinforcing outcomes of any consumer choice situation feedback into the individual's unique learning history, exerting influence upon subsequent patterns of behaviour in identical or similar future consumption situations.

The *learning history* of the BPM framework is ontogenic in form and is the hypothesised repository of previous schedules of reinforcement upon which current behavioural responses are contingent. In effect, the learning history is *what the consumer brings to a particular choice situation*, representing his or her unique set of experiences of previous purchase and consumption situations, together with their positive and/or negative reinforcing consequences, augmented with those contingencies not directly experienced but acquired via additional means; e.g. a verbally recounted behaviour-outcome experience of a third party that has acquired some degree of saliency, the socio-culturally transmitted rules governing the food to be consumed at a particular occasion or festival, etc.

Each individual organism, however, is also a member of a particular species. According to Skinner (1974), each species member is genetically endowed with a particular set of physiological-anatomical capabilities that are an outcome of the contingencies of survival that the species has been exposed to during the course of its evolutionary history. Moreover, Skinner believed that the species member becomes an individual as a consequence of the contingencies of reinforcement to which its behaviour is exposed during its own ontogenic history in a similarly adaptive manner, operant learning effectively constituting the process via which the genotype is transformed in a phenotypic manner during transactions between organism and environment; a view broadly supported by evolutionary biologists such as Dawkins (1988). Certain behaviour patterns also have a phylogenetic history, however: the salivatory reflex in Pavlov's dogs, for instance, evolved to prime the digestive system for the receipt of food; similarly, where a mother pacifies a crying infant with food and nourishment, she is responding to the adaptive infant crying behaviour that evolved as a signal of distress.

With regard to this hypothesised phylogenetic history, Skinner's believed that: (a) the organism may be genetically primed to acquire certain survival-related contingencies more readily than other contingencies less significant to survival; (b) that certain reinforcement outcomes that facilitate or hinder survival may have a higher degree of saliency, potentially overriding other contingencies within the learning history in any given subsequent situation; and (c) that particular survival-relevant environmental events and cues may be more effective as discriminative stimuli in guiding behaviour in general.

To illustrate how such a phylogenetic history may exert influence upon current individual-level ontogenic learning, consider the example of the much-cited *Garcia Effect* in the classical conditioning literature. In the early 1960s, Garcia famously ate a particularly unpleasant paella and was violently sick, an event that led him to experience persistent feelings of nausea whenever he subsequently encountered paella again in the future. On the basis of this observation, Garcia and Koelling (1966) conducted a series of experiments to investigate the conditions under which classical conditioning of taste aversions may occur in laboratory rats. As a species, rats are notoriously difficult to poison because they have a tendency to consume a very small quantity of food, wait a considerable period of time to see if they are sick, and only then consume the remainder of the food once they are "sure" it is safe. In one stage of their experiment, Garcia and Koelling observed that although it is possible to condition an aversion to any food by means of a neutral stimulus (e.g. a loud sound, an electrical shock), as would be predicted by the Pavlovian paradigm and was evident in Watson's infamous "Little Albert" study, this conditioned reflex is nevertheless far weaker than the learned association acquired between a particular taste (e.g. saccharin solution) and subsequent nausea (actually induced via an injection up to twelve hours later).

According to Garcia and Koelling, this learning differential is a consequence of an innate *preparedness*, the rat's nervous system being predisposed to acquire taste-nausea associations more readily than, say, sound-nausea associations, because, quite simply, these are the conditions under which such associations are most likely to be learned in the animal's natural habitat. Conversely, in a subsequent stage of the experiment, Garcia and Koelling found that it was almost impossible to classically condition an aversion to plain water, whatever the noxious neutral stimulus with which it was paired, the rat's nervous system being characterised by a *contra-preparedness* to acquire an aversion to a substance as fundamental to survival as water. In other words, in both stages of the Garcia and Koelling experiment, there is evidence to support the notion of a biological disposition that may favour the learning of certain response-outcome associations more readily than others, and/or that may make certain situational cues more or less salient than others.

On a somewhat crude level, Garcia's own unfortunate encounter with a paella can be interpreted as further supporting evidence of preparedness as a phylogenetic learning bias. The purchase and consumption of one paella that resulted in a violent nauseous response was an instance of negative punishment, as defined by the operant learning theory, and proved far more persistent and enduring than other encounters with foods that Garcia merely found unpleasant or distasteful; an outcome supportive of the notion that schedules of reinforcement exert a differential effect relative to their survival significance.

On this basis, the theoretical possibility therefore exists that aspects of consumer behaviour may be determined, at least to some extent, by the operation of a species-level phylogenetic history upon a situation, effectively biasing the functioning of the individual-level learning history in much the same way that cognitive psychologists within the neo-Darwinian paradigm speculate that certain decision-making processes are biased by innate neural circuits that have evolved into species-stable anatomical structures through natural selection as a consequence of the "fitness-maximising" behaviours they generate (Tooby & Cosmides, 1992). Thus, a female consumer during the late stages of pregnancy, for example, may theoretically acquire an amplified preparedness in respect of health-related reinforcers and discriminative stimuli, relative to during other stages in her lifespan, in order to facilitate successful survival, reproduction and genetic transmission. In other words, as a function of a species-level phylogenetic history, the individual consumer may display inherent biases, either persistently or more variable over time, in respect of: (a) the reinforcing properties of particular response outcomes; (b) the relative saliencies of available discriminative stimuli; and (c) the extent to which different components of the ontogenic component of the learning history may exert influence within the current retail shopping situation.

A more comprehensive rendering of the BPM framework might, therefore, accommodate this species-level effect by incorporating a second learning history within its schematic representation,

a phylogenetic history, operating through an ontogenic history in any given shopping situation. The effect of such a secondary history would be to bias ontogenic learning in ways that are of evolutionary-psychological significance; e.g. making a pregnant consumer more salient to health-related contingencies, rendering a teenager preparing for a "first date" more susceptible to discriminatory stimuli that signal beauty or the latest fashions, and so on. For the purposes of this thesis, however, the addition of a secondary phylogenetic learning history would represent an over-complication, moving the scope of the study away from the emphasis upon the emitted behaviour of the individual in his/her current setting and toward the evolutionary-significant instincts and motivations (s)he brings to that situation; i.e. away from actual behaviour and back to the antecedents of that behaviour. Thus, in order to avoid such a diversion, the current rendering of the BPM retains the traditional unitary learning history construct only, albeit with the caveat that interpretation of any empirical data accrued must be sensitive to the possibility that this may be an ontogenic history that is at times biased in its application to environmental stimuli as a consequence of the phylogenetic heritage of the species to which a consumer belongs; e.g. making a pregnant consumer more salient to health-related contingencies, rendering a teenager preparing for a "first date" more susceptible to discriminatory stimuli that signal beauty or the latest fashions, and so on.

The BPM, then, regards reinforcement as the principal mechanism via which the environmental context within which a consumer consumes shapes subsequent behavioural responses in identical or similar choice situations in the future, the learning history representing an individual-level repository of such previous contingencies of reinforcement that is brought to bear upon the current retail shopping situation, subject to any phylogenetic biases.

From the perspective of the current research programme, it is not difficult to hypothesise a potential effect of the learning history upon consumer channel usage. Early experiences of emergent shopping media in particular exert a powerful influence upon subsequent experiences of such media (Burgess, 2003); an effect most commonly reported in the literature within the context of online security concerns, negative experiences (actual behaviour) and publicity surrounding them (rule-governed behaviour) acting as powerful disincentives to continued adoption of the novel channel or, at very least, making consumers extra-cautious in subsequent online purchase transactions (Athiyaman, 2002; Camp, 1999). Thus, from consumer to consumer, there are likely to be individual differences in the tendency to use available purchase options, differences that are an artefact of an individual's particular prior exposure to direct and indirect experiences of such options and manifest in his/her perceptions of the relative strengths and weaknesses of each available purchase channel (Sultan & Henrichs, 2000). This second research proposition of the thesis may therefore be expressed formally as follows:

P_2: The extent to which an individual utilises an available purchase channel will vary depending upon his or her own unique learning history of previous encounters with that channel and their reinforcing outcomes.

The Consumer Behaviour Setting

According to the formulation of the BPM framework outlined above, then, the consumer enters a retail environment (physical, virtual) in order to attain positive reinforcement, the application of the ontogenic learning history (subject to any latent phylogenetic effects) transforming that current retail environment into a shopping situation. A consistent feature of the schematic representations of the BPM depicted thus far in the current chapter has been the accommodation of a structure termed the consumer *Behaviour Setting*, effectively representing precisely that environmental context within which the act of choice/purchase is situated. As will be recalled from the historical overview of person-environment relationships presented in Chapter One, the term *behaviour setting* was originally coined by Barker (1968) as an objectivist level of environment, a specific point in space in which particular patterns of behaviour could be consistently observed irrespective of the individual actors present. These patterns of behaviour, termed *behavioural programmes*, were primarily regarded as an outcome of the built environment, as in the case of consumers moving up and down the aisles of a supermarket as they progress toward the checkout desk.

Within the extant BPM literature, however, the term is applied in a slightly different way. Specifically, it is used to denote the immediate environmental context within which consumer behaviour is located and, in particular, is applied as a unit of analysis within which to identify all of those environmental factors that, in interaction with the individual's learning history, may serve as discriminative stimuli – cues to the consumer of the likely reinforcing outcome of a particular choice response (e.g. Foxall, 1993b; Leek et al., 2000; M.Y. Soriano et al., 2002). Clearly, the two conceptualisations are subtly different; Barker is applying the term to denote a level of environment in which all consumers will respond to aspects of the built environment in a very consistent manner, whereas authors such as Foxall are applying the term in a more fluid way to delimit a context of behaviour in which more multi-faceted stimuli may acquire saliency to an individual consumer depending upon his or her particular learning history.

The primary purpose of delimiting a behaviour setting within the BPM framework, then, is to aid the identification of precisely those environmental variables that may serve the individual as discriminative stimuli and act as signals or "clues" as to the potential reinforcement value of various response outcomes. A crucial further step in this delimitation process must, therefore, be

to define some appropriate taxonomic structure with which to identify and classify relevant setting variables and their likely discriminatory potential.

Over the years, a number of authors have sought to identify all those contextual variables affecting the individual and organise them into the "ideal" classification system for research application. In the late 1950s, Pace and Stern developed a crude typology of variables observed in the typical American college environment, encompassing the five variable categories of "awareness", "community", "practicality", "propriety" and "scholarship" (Pace & Stern, 1958). Similarly, Hemphill factor-analysed the questionnaire responses of several hundred banking executives to develop a ten-category taxonomy of high-level managerial situations (Hemphill, 1959; Pace & Stern, 1958). Within the specific field of consumer research, Mehrabian and Russell proposed three categories of variable, based upon the affective responses they elicited from the consumer in terms of "pleasure", "arousal" and "dominance" (Mehrabian & Russell, 1974).

Historically, however, perhaps the most influential taxonomy of proximal-environmental factors in the marketing and consumer research literature has been the five categories of *situational variables* proposed by Belk (1974; 1975). According to Belk, the situation is the interface between the person (e.g. the computer games buyer in the earlier example) and the stimulus-object (games console purchased), all those characteristics of the situation exerting influence upon this process being defined as situational variables. Thus, neither characteristics of the individual consumer visiting the computer games store nor of the item eventually purchased can be deemed situational in Belkian terms. However, if the consumer in the store is persuaded to purchase a particular games console on the basis of the opinions expressed by a helpful sales assistant, then the interaction with that assistant constitutes a situational variable because that interaction is unique to the particular shopping situation the consumer is in.

Given the not insubstantial body of literature accumulated over the years relating directly to the Belk taxonomy, the five categories of situational variable proposed may serve as a useful basis for a taxonomy of *setting variables* applicable to the current research programme. Indeed, as highlighted earlier, what have traditionally been termed situational variables can be transformed into discriminative stimuli within a behaviour setting by the application of the individual consumer's learning history. Thus, the only drawback in adopting the Belk taxonomy as a setting variable taxonomy lies in Belk's exclusion of product attributes themselves which, in the BPM framework, are a common form of discriminative stimulus as in the above example of a consumer purchasing a *Playstation* games console in response to its *Sony* brand. However, this limitation could easily be overcome by permitting product, retailer and channel attributes to be accommodated within the Belk taxonomy as setting variables in their own right.

Belk's first category of "physical setting" variables may be redefined as the *physical characteristics* of the consumer behaviour setting. At its simplest level, it begins with the spatial and institutional location of a physical retail store (Bucklin, 1967), but may also be expanded to encompass the location in which a consumer reads a mail-order catalogue or where a Web site is accessed, together with any complications arising from the intervening technologies. It also accommodates aspects of the physical environment such as weather and climatic conditions (Maunder, 1986), visible in-store configurations of merchandise, point-of-sale materials and the provision of information, for which there are obvious catalogue and Internet parallels (Braun, 1993; Dholakia & Rego, 1998; Rook & Fisher, 1995), and all of those variables Kotler (1973) defined as "store atmospherics", such as background music, lighting and colour scheme (Bellizzi & Hite, 1992; North & Hargreaves, 1996; Phillips, 1996). Again, there are obvious equivalents here in remote shopping contexts, such as the product illustrations and their accompanying descriptions to be found on the pages of a catalogue or a retailer's Web site. Extend the category further to encompass attributes of the product purchased (brand name, appearance, quality, etc.) and the first of Belk's situational categories becomes a viable physical dimension of the consumer behaviour setting, applicable in both physical and virtual retail environments.

The second Belkian category, "social surroundings", may equally form the basis of a classification of the *social characteristics* of the behaviour setting. The primary emphasis is upon the presence or absence of others, who may become either discriminative stimuli or sources of reinforcement via both their verbal and non-verbal behaviour patterns, along with their specific roles, role attributes and the opportunities they afford for social interaction. Recognition of a social dimension would thus include anything from conversations with sales staff and the awareness of mall security personnel, through to those significant others accompanying an individual during a shopping trip and any encounters with, or proximity to, verbalising and non-verbalising total strangers (Harrell, Hutt, & Anderson, 1980; Stoltman et al., 1999; Uzzell, 1995; Willis, 1990). This classification readily lends itself to remote shopping situations (conversations with telesales operators, attendees at a party plan event, occupants of a virtual community, etc.) and, in service encounters, even extends to the staff delivering a service who, in effect, constitute attributes of the "product" itself.

Belk's "temporal perspective" requires no modification and may serve as a viable classification for *temporal characteristics* in its present formulation. By definition, the majority of setting variables codified under this heading are equally applicable irrespective of the retail format, factors such as time of day and constraints upon time available for shopping exerting quite obvious effects upon consumer behaviour. Seasonal variables must also be accommodated within this category, such as availability of different product classes at different times of the year, and event proximity

effects, such as time since last meal or date relative to pay-day (Berkowitz, 1986; Herrington & Capella, 1995).

The category of "task" is a more difficult Belkian concept to accommodate within a consumer behaviour setting taxonomy, given that it is primarily used to classify more person-bound and cognitive aspects of the shopping process such as situational influences upon the consumer decision-making process; i.e. what are typically construed of as "mental events" within a Skinnerian conceptualisation. In principle, as Bloch et al. (1994) correctly observe, there is no reason to preclude intrinsic factors *per se* from any analysis of a consumer's environment, the individual's internal environment being as valid a focus of inquiry as the external environment itself. Within the specific context of defining the principle dimensions of the consumer behaviour setting for BPM application, however, it is nevertheless difficult to see how a "task dimension" may constitute a valid construct, any intrinsic biases exerting influence upon the choice process being already encapsulated within the learning history that the consumer brings to that setting. Thus, for this reason, Belk's "task" category is excluded from the present proto-taxonomy of consumer behaviour setting variables.

Taken at face value, Belk's final situational category of "antecedent states" may equally appear inappropriate for inclusion within a taxonomy of setting variables, this category typically encapsulating all of those transient person-bound factors that an individual brings to a shopping episode, such as temporary physiological conditions and mood-congruency effects. However, if Bloch et al.'s assertion that the internal environment is as valid a component of the consumer behaviour setting as the external environment, then such a dimension *can* be accommodated within a taxonomy of setting variables provided that no variables are included within that dimension which are already subsumed within the learning history.

For instance, Belk's observation that consumer choice may be impeded by transient physiological conditions, such as fatigue or symptoms of illness, could be regarded as valid setting variables. Similarly, although behaviourists generally regard mood states as responses to discriminative stimuli (e.g. Mehrabian & Russell, 1974; Russell & Mehrabian, 1978), they may well constitute setting variables in their own right if they predate and pervade the consumer's current shopping episode – indeed, mood states may in themselves become discriminative stimuli at times, say, where an individual consumer's unrelated depressed mood becomes associated with a particular product in the retail environment by virtue of the operation of the learning history upon that product. Therefore, provided due care is exercised in the empirical application of such a construct, a dimension of the proximate environment derived from Belk's "antecedent states" category can be incorporated within a setting variables taxonomy; a dimension that will be labelled as *intra-individual characteristics* within the present proto-taxonomy in order to render it more distinct from the broader Belkian one.

Taken in sum, the four dimensions of the consumer behaviour setting and their subsumed variables may thus be usefully summarised in **Table 3** below. On the basis of this proposed taxonomy, it is should be possible to define a behaviour setting by reference to its four primary categories and to identify within those categories relevant setting characteristics that may be transformed into discriminative stimuli during transactions between the setting itself and the individual consumer's unique learning history of previous encounters with the characteristics of previous settings.

Table 3: Characteristics of the Behaviour Setting

Category	Example Variables
Physical Characteristics	*Spatial location, institutional location, virtual location, store / catalogue / Website layout, visual depiction of merchandise, provision of product descriptors, actual product attributes, marketing "atmospherics", etc.*
Social Characteristics	*Presence or absence of other people, direct shopping companions, indirect shopping companions (strangers), sales staff, roles and role attributes of third-parties, attendees at a party plan event, service providers, telesales staff, 'chat-room' participants, etc.*
Temporal Characteristics	*Time of day / week / month, seasons, festivals, time constraints, opening hours of stores or telesales lines, event proximity (time since last meal, payday), etc.*
Intra-Individual Characteristics	*Fatigue, hunger, menstrual effects, symptoms of physical illness, symptoms of mental distress, mood states brought to a shopping episode, etc.*

Within the extant BPM literature itself, Foxall (1997a) has similarly proposed that his behaviour setting construct may also be defined according to four key categories of environmental stimulus: (1) physical stimuli, such as point-of-sale materials, product displays, and brand/store logos; (2) social stimuli, such as the presence of sales staff, presence/absence of significant others, behaviour of co-diners in a restaurant, etc.; (3) temporal stimuli, including store opening hours and the duration of a "special offer"; and (4) regulatory stimuli, representing the rules which constrain behaviour within a particular setting, be they imposed by the self or by third-party interventions. To date, however, the four categories Foxall suggests have been presented more as "sketches" of potential sources of discriminatory stimuli within the environment, rather than as a comprehensive and empirically-validated taxonomic structure, and there has been no attempt to accommodate variables within the internal environment of the consumer, despite Skinner's

assertion that the organism itself could be viewed as a fundamental component of the behavioural environment provided that its characteristics could be investigated objectively without recourse to "mentalistic" introspection. Moreover, Foxall's addition of the "regulatory stimuli" category can, again, be regarded as an unnecessary complication; rules constraining behaviour that originate in the self must clearly have been acquired via previous schedules of reinforcement, which are already located within the learning history brought to bear upon a behaviour setting, whilst rules generated by third-parties are typically imposed via other setting characteristics anyway, as in the use of so-called "snake" barriers to control the movement of a queue in a bank or post office (a physical stimulus) or the verbal issuing of instructions by a car park attendant (a social stimulus).

Overall, given that Foxall's stimulus categories are less well-defined, and that the regulatory category can be regarded as an unnecessary inclusion whilst the intra-individual dimension represents an unfortunate exclusion, it is proposed for the purposes of the present thesis to retain the more inclusive and potentially parsimonious four-dimensional setting structure proposed in **Table 3** above – a structure whose subsumed variables may be claimed to have at least indirect empirical support by virtue of their not infrequent investigation with the Belkian literature. Therefore, within the proceeding analysis, it will be assumed that the individual consumer brings his or her unique learning history to bear upon a setting, variables within four primary dimensions of that setting holding a capacity to become discriminative stimuli during the resultant person-environment transaction and thus serve as cues to guide the consumer toward the response option most likely to yield a satisfying (i.e. positively reinforcing) behavioural outcome. Moreover, it is this interaction between the learning history of the person and variables within the setting environment (**P*E**) that defines the retail *shopping situation*, the setting itself being rendered situational in that this is a spatially and temporally specific "encounter" between the consumer learning history in its then-present state and the particular matrix of environmental variables prevailing at that point in space and time.

In respect of the specific issue of multichannel consumer behaviour, a number of recent studies have suggested that adoption of Internet shopping channels, or selection between store-based and remote purchase channels, are at least in part determined by situational variables, in the Belkian sense of the term, either in isolation or in interaction with geodemographic, person-bound and/or retailer/product attributes (Athiyaman, 2002; Gehrt et al., 1991; Gehrt & Yan, 2004; Jayawardhena et al., 2003; Kang & Kim, 1999; Lavin, 1993; Nicholson et al., 2001, 2002; Palmer, 1997; Sultan & Henrichs, 2000; Walsh et al., 2003; Youn-Kyung, 2002). On this basis, it may therefore seem reasonable to propose that similar effects will be observable in the case of the setting variables outlined above, particular variable types dominating where particular channel or channel combinations are selected as the preferred modes of purchase. However, from a

BPM perspective, it is not the setting variables *per se* that are the crucial determinants of a consumer's behavioural response. Rather, it is the transformation of certain setting variables into discriminative stimuli through the application of an individual's learning history that delimits a setting as a historically and spatially specific retail shopping situation. Put another way, it is those setting variables that are transformed into discriminatory stimuli that are relevant to the BPM conceptualisation of the individual-environment transaction.

Thus, it is only those particular behaviour setting variables that become discriminative stimuli that would be expected to be the primary contributors to channel choice, a proposition which may be expressed as follows:

> *P_3: Different retail purchase channels are associated with the influence of different setting-derived discriminatory stimuli.*

The Scope of Consumer Behaviour

The process depicted in **Figure 3** may usefully be summarised by reference to the example of the female consumer visiting a *Kookai* store in search of an outfit to wear at a forthcoming wedding, discussed at length in Chapter One. Ultimately, the primary incentive for shopping is the positive reinforcement that will arise from wearing the "ideal" outfit at the wedding, probably deriving from both the pleasure and satisfaction of wearing that outfit (*hedonic reinforcement*) and from admiring comments from other wedding guests (*informational reinforcement*), perhaps underpinned by obtaining value-for-money and not spending an excessive amount on an unwise choice (*negative reinforcement*). These reinforcement outcomes, however, are not immediately obvious to the consumer until the outfit itself is actually identified and acquired. The process involved in obtaining that outfit is complex.

For simplicity, let us suppose that *Kookai* is the consumer's favourite fashion retailer, so she is predisposed to seek out an outfit there as a first "port-of-call". This predisposition would be the result of many previous successful purchases of this nature in *Kookai*; i.e. a product of her *learning history*. The *Kookai* retail store exists independently of the individual consumer, as a behaviour setting in BPM terms, but it becomes a *situation* as soon as the consumer enters it and begins to be interact with factors in the *Kookai* store environment; that is, by *behaviour setting variables*, such as the range of merchandise on display (a *physical characteristic* of the setting), the opinions offered by the consumer's shopping companion (*social*) and the general fatigue the consumer is suffering from (*intra-individual*) as the only time available to shop is after a hard day at work (*temporal*).

During the product search process, the consumer's learning history is applied to the setting and its characteristics in a series of person-environment (*P***E*) interactions. Some of these interactions will leave certain setting variables objective and without influence, others may not even be consciously noticed at all. A minority of setting variables will, however, acquire a saliency as a result of the consumer's learning history and become *discriminatory stimuli.* Thus, once a sufficient number and/or strength of discriminatory stimuli have directed the consumer toward an appropriate purchase option, she will emit the behavioural *response* and buy the outfit selected, the hope being that these discriminatory stimuli will have reliably signalled a positively reinforcing outcome when the outfit is worn at the forthcoming wedding. A more complete rendering of the BPM framework would, as highlighted previously, include "feedback" arrows to the learning history, this particular shopping episode contributing to the repository of contingencies of reinforcement that will exert influence on subsequent shopping episodes. So as not to over-complicate the diagram, however, these additional arrows have been omitted from the diagram in the interests of clarity.

An actual shopping episode of this nature would, obviously, probably be far more involved. A great many stores within a mall or malls may be visited during the course of the shopping trip, constituting a much larger behaviour setting for the consumer to behave in, and the whole process may involve repeated visits to the mall(s) in question over several weeks. A number of potential purchase options may also be identified on the basis of discriminatory stimuli, other setting variables perhaps becoming negative discriminatory stimuli (e.g. the consumer likes a potential outfit, but is dissuaded by a friend) and guiding the consumer away from those purchase options and toward others. It may even be that a "perfect" outfit (i.e. one that would maximise positive reinforcement) is not available in the consumer's size, or is perhaps beyond her price range, necessitating an even greater reliance upon the ontogenic learning history to identify further discriminatory stimuli that may signal the "next best" option. Moreover, within the context of the present study, it may well be the case that the retail setting spans both physical and virtual consumption spaces, the consumer perhaps consulting mail order catalogues and retail Web sites during the course of this particular shopping activity.

Already, then, the BPM framework is presenting itself as a viable interpretive technology with which to generate an operant account of consumer behaviour at the physical-virtual interface, its adherence to the Skinnerian three-term contingency seeming capable of providing a means via which to generate an account of multichannel shopping on the basis of the combined effects of the potential reinforcement to be gained from a purchase, the individual consumer's prior experiences of such purchases and all of those variables located within the physical and/or virtual settings that may serve as "clues" to the success or otherwise of the eventual purchase outcome. In short, the summative BPM depicted above offers a potential situated and behavioural-

ecological perspective on the consumer choice process, applicable irrespective of the actual retail format or formats utilised and without recourse to investigation of pre-behavioural cognitive activities and similar "mentalistic" events. Nevertheless, before proceeding to empirically validate that potential explanatory power within the specific context of multichannel shopping, there are further complicating factors to consider.

In particular, the account of the person-environment transaction presented here can be regarded as overly-simplistic because it presupposes a considerable degree of freedom upon the part of the consumer to behave (i.e. to select goods and services) as (s)he chooses. The reality, of course, is that there will be varying degrees of constraints imposed upon the consumer from setting to setting and/or from shopping situation to shopping situation. In some circumstances, the consumer may have considerable latitude in respect of how (s)he may behave; in others, (s)he may be more directed toward a particular mode of behaviour or toward selection of a particular purchase option. At a simplistic level, contrast the degree of freedom that a consumer who is not brand-conscious may enjoy in selecting an ordinary jar of instant coffee in a supermarket, for example, with the marked lack of freedom that same consumer might experience if, say, she has no option but to purchase her electricity supply from the only state-licensed electricity generating company allowed to operate within her geographical area. Clearly, a truly parsimonious behavioural perspective must also be able to accommodate freedoms and constraints such as these within its accompanying explanatory framework.

Within the BPM literature, these freedoms and constraints are typically embodied within the concept of the *scope* of the setting, a term first coined by Schwartz and Lacey (1988) to denote the fact that animals in laboratory-based learning experiments have relatively little latitude in respect of the responses they may make and the reinforcers they may obtain as a result, whereas humans in the "real world" beyond the operant laboratory often have quite variable degrees of freedom in the behaviours they may engage in and the rewards/punishments forthcoming as a consequence of those behaviours. Schwartz and Lacey believed that all behavioural contexts could thus be defined by their relative degree of *behavioural scope*, along a continuum from *closed* (no latitude for choice whatsoever) to *open* (absolute freedom of choice). In practice, totally "closed " and totally "open" contexts would be quite rare in humans, most behavioural episodes actually varying along a continuum of "relatively closed" to "relatively open", although it is convention to omit the adjective "relatively" in the interests of narrative clarity.

According to Foxall (1996), the scope of any behavioural context is a function of: (a) the number and accessibility of available reinforcers, together with the complexity of operants necessary to attain them; and (b) the degree of control others enjoy over those reinforcers and the availability of alternatives to the consumer to escape that control. In closed contexts, the environment is very much under the control of agencies other than the consumer, behaviour being carefully

regulated and directed toward the efficient execution of a transaction; e.g. where the layout of a bank tightly controls the queuing behaviours of customers or where social convention dictates that an individual must purchase a gift for his or her mother on Mothering Sunday. In their most regulated forms, closed contexts are the closest approximation to the Barkerian conceptualisation of behaviour settings, consumers effectively being directed toward performance of a strict behavioural programme. By contrast, open contexts are comparatively devoid of such pressures and the consumer is relatively free to determine which stores to visit, which products/services to purchase, and so on. In Foxall's (1998) conceptualisation, the primary function of retail marketing is to render a behavioural context (i.e. a behaviour setting) as closed as possible through rigid control of all elements of the store environment and the marketing "mix", the goal being to make procurement of the retailer's offering to the market "inevitable" and "irresistible" to the consumer.

Positive reinforcement may be either hedonic and/or informational in character. As noted earlier, it therefore follows that there are four principle classes of operant behaviour, defined by their degree of hedonic reinforcement (high and low) and informational reinforcement (high and low) respectively; the maintenance, accumulation, pleasure and fulfilment classes of shopping behaviour. The resultant four categories are, however, *behavioural* categories only and it is a fundamental tenet of the BPM that behaviour is contingent upon environmental factors. In addition to reinforcement form, it is therefore necessary to also consider the nature of the setting in which that reinforcement is forthcoming, particularly in respect of its degree of scope – closed settings are characterised by a high degree of environmental control over behaviour, whereas open settings are low in environmental control and permit a greater degree of behavioural latitude. Thus, by accommodating setting scope within the matrix, it is possible to derive eight behaviour-by-setting *contingency categories* (CCs) that, in effect, constitute particular *P*E* categories of shopping situations (**Figure 5**, below).

As can be seen from the below, accommodation of the additional variable of setting scope segments the four behavioural categories into eight contingency categories (CCs), which effectively constitute the outcomes of specific shopping situations:

Maintenance: In closed settings (CC8), maintenance purchasing takes the form of *mandatory consumption* and is effectively the form of consumer behaviour associated with the normal business of being a member of society, encompassing everything from the payments of taxes and community charges through to contributions to employers' pension schemes and the insurance premiums associated with endowment mortgages. In open settings (CC7), by contrast, it is associated with *routine consumption* acts, such as the purchase of groceries in the supermarket, and is typically seen as permitting a greater degree of consumer choice than in mandatory consumption situations; on the one hand,

purchasing food constitutes an obligatory act of survival-related shopping, but, at the same time, there is very often considerable latitude in, say, brand choice by virtue of the sheer range of goods on sale on the typical supermarket shelves. Of course, there may be considerable individual differences evident, resulting from either previous learning experiences and/or a person's place in the distal environment; a car owner, for instance, may have far more latitude in respect of actual supermarket choice than a consumer wholly reliant on walking or on public transport. Thus, what is an open setting to one individual may be far more closed a setting to another.

Figure 5: Contingency Categories as Situational Outcomes (after: Foxall, 1997c)

Operant Classes	CLOSED ——— *Setting Scope* ——— OPEN	
ACCOMPLISHMENT (high hedonic, high Informational)	CC2: Fulfilment (e.g. casino gambling)	CC1: Status Consumption (e.g. luxury car)
PLEASURE (high hedonic, low Informational)	CC4: Inescapable Entertainment (e.g. in-flight movies)	CC3: Popular Entertainment (e.g. cinema-going)
ACCUMULATION (low hedonic, high Informational)	CC6: Token -Based Consumption (e.g. spending Air Miles)	CC5: Saving & Collecting (e.g. saving Air Miles)
MAINTENANCE (low hedonic, low Informational)	CC8: Mandatory Consumption (e.g. local taxes)	CC7: Routine Consumption (e.g. groceries)

Accumulation: In closed settings (CC6), accumulation shopping typically takes the form of *token-based consumption.* Here, incentives provided by the retailer are spent with that retailer (e.g. loyalty card points, Air Miles), the consumer being "locked into" a particular pattern of buying behaviour by the terms and conditions associated with the incentives themselves. Closely related to this, open setting accumulation shopping (CC5) involves

the purchase of the goods themselves that are accompanied by the incentives, *saving and collecting* serving as constant informational reinforcers of a person's performance in the role of consumer as (s)he gets ever close to the hedonic reinforcement associated with spending the tokens accrued.

Pleasure: In closed settings (CC4), pleasure shopping is perhaps most associated with *inescapable entertainment*: that is, the consumption itself has a potential to be pleasurable, but may in fact sometimes prove unpleasant or annoying because it cannot be avoided. In-flight meals and movies are a very good example of this form of consumption as they must be "purchased" as a component of the airline ticket; indeed, aircraft are among the most closed of all settings as the passenger cannot even walk around the cabin at will and almost his/her every act are controlled by crew. In open settings (CC3), on the other hand, pleasure shopping often involves the consumption of *popular entertainment*, hedonic reinforcement being provided by movies watched, music purchased, books read, and so on. New technologies increasingly make this form of consumption more positively reinforcement through their accompanying freedoms, as witnessed in the rise of the *Walkman*, the ubiquity of the home video-recorder and the current vogue for online music and the portable MP3 player.

Accomplishment: In closed settings (CC2), accomplishment consumption is characterised by pleasure and, in particular, *fulfilment.* The example cited in the matrix above is that of casino gambling; gambling within such a context is highly reinforcing, particularly where there is an occasional win to attract admiring looks from others and to provide confirmation of the gambler's skill, but it is also one of the most tightly regulated of all retail/service environments, exemplified by the operator's imposition of "house rules", by the "costumes" typically worn and accompanying dress/behavioural codes, and by the general absence of clocks in an attempt to seek to control even patrons' perceptions of time. In more open accomplishment situations (CC1), *status consumption* acts are often characterised by both the consumer's acquisition of the latest emblem of a particular social grouping (e.g., the current "must-have" model of a luxury car) and by a more generalised need for constant innovation, obtaining the latest fashion goods and high-technology products being a source of intense hedonic and informational reinforcement – literally, this is consumption in which the pleasure derived from being admired consuming is at times as great as that derived from the actual consumption itself.

The above eight contingency categories have been defined and/or empirically verified in a number of recent behavioural-ecological accounts of consumer choice employing the BPM conceptual framework (e.g. Foxall, 1992a, 1992b, 1993b, 1994, 1995a, 1996, 1997a, 1997b, 1998b, 1999a, 1999b, 1999c, 2003; G.R. Foxall & G.E. Greenley, 1999; Foxall & Yani-de-Soriano, 2004;

Leek et al., 2000; Newman & Foxall, 2003). In effect, they represent taxonomy of behavioural shopping situations that may be applicable in multichannel contexts and are a logical culmination of all of the key BPM elements. The situations are formed during a person-environment interaction in which a particular operant class of reinforcement-defined behaviour (P_1) is performed, the individual's ontogenic (P_2) learning history having identified those setting variables that may best serve as discriminatory stimuli (P_3) signalling the reinforcement outcomes of available choice options, subject to any variations in behavioural latitude delimited by that particular setting's scope. Thus, by accommodating the final scope variable within the model, it becomes possible to formulate the fourth and final research proposition of the present thesis, namely:

P_4: Different retail purchase channels will be favoured in different shopping situations.

Toward an Operant Interpretation of Channel Choice

To summarise, this thesis seeks to explore the issue of multichannel shopping from a radical behaviourist perspective. Specifically, whereas extant accounts of multichannel shopping typically adopt a retailer-centric view of this complex phenomenon, applying market segmentation rationale in the identification of existing and/or potential multi-format buyer categories, it has been argued that the more grounded and *situated* emphasis of behaviourism holds a capacity to shed light upon consumer adaptation to, and use and integration of, emergent retail channels and to yield insight into what it is that multichannel consumers actually *do* when shopping in emergent physical-virtual retail environments.

The central theme of the present chapter has been the inherently evolutionary nature of multichannel consumer behaviour, each shopping experience – be it physical or virtual – holding a capacity to shape subsequent experiences in an adaptive manner, operant learning representing one potential mechanism via which that adaptation may be realised during person-situation transactions. The BPM has been identified as a viable interpretive technology with which to construct a behavioural and longitudinal account of multichannel shopping, certain revisions to that technology being advocated both in the interests of conceptual clarity and to render it a more applicable to the current research objectives.

Despite these revisions, however, the BPM framework presented herein as a "customised" research tool remains consistent with the fundamental three-term contingency that is central to radical behaviourist interpretations of human behaviour. In particular, the BPM proposes that

consumer behaviour is directed toward the maximisation of positive reinforcement and the minimisation of negative punishment. Positive reinforcement is subject to bifurification, high-low levels of hedonic and informational reinforcement generating four operant classes of behaviour that are hypothesised as being associated with particular patterns of purchase channel usage; maintenance shopping, accumulation shopping, pleasure shopping and fulfilment shopping. However, due to the consumer's initial ambiguity as to the likely reinforcing consequences of available purchase options, (s)he must rely upon the application of a unique ontogenic history of reinforcement-contingent experiences which, subject to any phylogenetic biases operating at a species level, enable him/her to both draw upon past experience and to identify those environmental variables within the retail setting that may serve as appropriate discriminatory signals of likely purchase outcomes, the subsequent choice response emitted nevertheless being constrained by the degree of closure the retailer exerts over that environmental context – closure which effectively dichotomises each of the four operant behaviour classes into eight specific contingency categories which, seen in aggregate, constitute eight distinct forms of shopping situation anticipated to be associated with particular patterns of consumer channel preferences.

Taken in sum, the central arguments presented within the current literature review and conceptual development may be usefully summarised as four key research propositions:

P_1: Different retail purchase channels are associated with different operant classes of consumer behaviour.

P_2: The extent to which an individual utilises an available purchase channel will vary depending upon his or her own unique learning history of previous encounters with that channel and their reinforcing outcomes.

P_3: Different retail purchase channels are associated with the influence of different setting-derived discriminatory stimuli.

P_4: Different retail purchase channels will be favoured in different shopping situations.

Overall, it is anticipated that empirical validation of the above four research propositions may facilitate the construction of a parsimonious account of consumer behaviour in multiple physical and virtual retail environments and, moreover, to shed light upon the transactional nature of the person-situation relationship a multichannel context. It is thus to the systematic investigation of these four central propositions that the present thesis must now turn, seeking to develop a behavioural perspective on multichannel shopping through rigorous and systematic empirical inquiry.

3. GIRLS IN THE (CYBER-)MALL

"Since a scientist is a behaving organism, we should expect that the concepts of behavior analysis would apply to the behavior of scientists as much as to anyone else. We can reasonably ask, 'What are the activities someone must engage in to be called a scientist?' Those activities should be understandable in the light of our concepts of operant behavior and stimulus control."

W. M. Baum (2004: 123)

Introduction

The previous chapter examined the issue of multichannel consumer behaviour from a behaviourist perspective, noting the evolutionary nature of the consumer adoption, use and integration of emergent retail formats and the status of operant learning as the principle mechanism via which that evolutionary process is moderated during successive encounters with environmental events. The chapter identified the radical behaviourist conceptualisation of operant learning as the most appropriate formulation available for investigation of complex human behaviour patterns within their naturalistic settings, the Behavioural Perspective Model (BPM) representing the principle framework derived from radical behaviourism currently available within the consumer research discipline (Foxall, 1986, 1993a, 1999c). The chapter then proceeded to detail the elements of that BPM framework for application in the current investigation of multichannel consumer behaviour, a series of research propositions being formulated on the basis of the extant literature to serve as a foundation for the subsequent empirical stage of the present research programme.

Building upon the conceptual framework developed thus far, this chapter seeks to validate that framework via a systematic process of empirical research. Specifically, following an initial re-statement of the philosophical assumptions inherent in radical behaviourist approaches to scientific inquiry in general, and underpinning the BPM empirical approach in particular, the chapter proceeds to document the design and implementation of a programme of research facilitated by a leading UK apparel retailer in which the consumer use of multiple retail channels has been subjected to a longitudinal process of applied behavioural analysis, reporting preliminary statistical data from that study to be extrapolated upon in Chapter Four. The principal goal of the research has been to shed light upon the evolving nature of consumer behaviour at the

physical-virtual interface and to serve as a basis for the construction of a behaviour analytical account of the multichannel shopping process in the subsequent discursive chapters of the thesis.

Science as the Behaviourist Views It

As discussed in Chapter Two, the BPM approach to consumer research is founded upon the radical behaviourist view of science and its accompanying methodological standpoint, known as Applied Behaviour Analysis. Like Watson, Skinner believed that behaviour was a valid subject upon which to construct a scientific discipline of psychology, and that the optimal way of investigating that behaviour was via laboratory-based experimentation, quantification and the controlled utilisation of reliable and valid metrics. Skinner shared Watson's general view that there was no room within a truly scientific psychology for data acquired through introspective means, although he was more accommodating of internal events such as thinking and reasoning, albeit re-defined as behaviours, and recognised that the species-specific innate phenomenon of verbal behaviour must also become a focus of inquiry due to its properties as a discriminative stimulus and/or source of reinforcing outcomes.

Skinner also departed from Watson in that he came to regard the hypothetico-deductive method as counterproductive at times, the mentalistic behaviours of "theory-builders" often constraining scientific exploration in circumstances where theoretical constructs validated via hypothesis-testing and the application of inferential statistical procedures become accepted as a given, even though they may well constitute little more than "explanatory fictions" due to the fact that the constructs accepted are, in fact, impossible to prove or disprove in "hard" scientific terms. Instead, Skinner favoured a more exploratory approach to the study of behaviour, through which general scientific laws may or may not emerge, the goal simply being better prediction and control of behaviour and the construction of more economical and expedient causal explanations on the basis of the least number of theoretical constructs possible – most notably, the widespread application of the three-term contingency as the preferred "technology" with which to better understand behaviour and the nature of the organism-environment interaction (Skinner, 1957, 1966, 1974, 1981).

Methodologically, Skinner's empirical strategy of Applied Behaviour Analysis owes much to the philosophical position of pragmatism. Skinner recognised that complex human behaviours were rarely amenable to formal experimentation within the controlled environment of the operant laboratory and, as a consequence, he instead advocated a more behavioural-ecological investigative approach via which knowledge gleaned in the laboratory could subsequently be applied in the study of behaviour within naturalistic settings. The overall stance nevertheless remained staunchly positivist, relying upon the use of standardised metrics of independently

observable acts of behaviour, although Skinner accepted that internal-yet-public components in the causal explanations of behaviour, along with analyses of verbal behaviours and their reinforcing consequences, may sometimes demand a degree of interpretation upon the part of the researcher if they were to be effectively and efficiently examined. That said, even where interpretation *is* a valid method of inquiry, Skinner remained insistent that there should be no recourse to mentalism on the part of either the investigator nor the investigated, and that the scientific approach must still be adhered to throughout; i.e. any explanations generated through interpretation must be formed purely on the basis of a series of objective, rigorous and concurrent independent observations (Bolles, 1979; Foxall, 1995b, 1997c; Mowrer, 1960). This strategy thus locates the radical behaviourist methodology at some intermediate point along the positivism-interpretivism continuum, the BPM approach effectively constituting a pragmatic positivist contribution to the current "interpretive turn" in contemporary consumer research – a contribution the current chapter has sought to exploit in the investigation of multichannel consumer behaviour documented herein.

"One Brand, Three Ways to Shop"

The principal objective of the empirical phase of the thesis was to shed light upon the consumer use of multiple retail channels and the extent to which this usage evolves over time in an environmentally-contingent manner. More specifically, the research undertaken sought to establish the validity of the BPM 'technology' detailed in Chapter Two as a framework for understanding multichannel consumer behaviour via a rigorous testing of the four key research propositions formulated therein.

As discussed previously, the retail apparel sector was selected as a focus for the empirical work for three specific reasons: (1) apparel products have featured prominently throughout the development of interactive retail formats such as the Internet, clothing products being one of the first major categories of merchandise to become established online alongside books, compact discs and computer software; (2) a high level of retailer presence has been evident in this sector since the late 1990s across retail formats, apparel retailers thus representing one of the most significant, established and sophisticated operators of the multichannel marketing model; and (3) consumer behaviour within this sector is inherently multi-faceted, apparel purchasing being underpinned by both functional and hedonic factors depending upon the particular shopping situation in question (Goldsmith & Flynn, 2004).

From the outset, it was apparent that the general research strategy required would be longitudinal in form, a temporal dimension being necessary to capture both the notion of a cumulative

individual learning history (G.R. Foxall & G.E. Greenley, 1999) and the status of time as a significant behaviour setting variable in its own right (Belk, 1975; Roslow, Li, & Nicholls, 2000). In view of this required timeline, not to mention the difficulties inherent in maintaining any longitudinal sample over a substantive period, the decision was taken to seek retailer support for the research in order to facilitate meaningful long-term access to multichannel retail consumers and to minimise potential sample 'churn' rates via incentivisation.

The host organisation selected as facilitator was *Next Retail PLC*, a leading apparel retailer in the United Kingdom operating successfully in both physical and virtual retail environments, and via both traditional retail stores and extensive direct marketing activities. Founded in 1864 as *J. Hepworth & Sons (Gentlemen's Tailors)*, the company launched *Next* as a female apparel subsidiary in 1981, the success of this mid-range high street label leading to adoption of the *Next* brand across the *Hepworth* group by 1984. Two years later, the company acquired the leading UK mail order catalogue operator *Grattan*, a development that would pave the way for the launch of the initially 'up-market' *Next Directory* catalogue in 1988. By the mid-1990s, the *Directory* had become firmly established within the UK and Eire, the catalogue serving as a platform upon which to extend the firm's market offerings into the home furnishing sector.

Operating under the slogan of "*One Brand, Three Ways to Shop*", the company made the transition to multichannel retailer in 1998 with the introduction of an online version of the *Directory*, an initiative that would see *Next*'s e-commerce operation become one of the "top five" UK retail websites in respect of electronic purchases within a twelve-month period.

As of 2004, *Next* boasts some 358 retail stores in the UK, with a further 70 overseas franchise operations in territories as diverse as Asia, the Middle East, and Scandinavia. Annual retail turnover is currently around £2343m, the *Directory* accounting for some £534m, 85% of which is attributable to telephone call centre ordering and 10-15% to Internet-based purchasing. Thus, in terms of the definition of multichannel retailing adopted in this thesis, *Next* appeared to fulfil all of the criteria for a research facilitator by virtue of its integration of traditional physical retail stores with catalogue, telephone and Internet shopping services (Baiden, 2000).

Collaboration with *Next*'s Group Marketing Division began in the spring of 2000. As the overriding objective of the research was to engage in an in-depth and prolonged behavioural analysis of multichannel buying, it was agreed from the outset that the most appropriate research design would involve the recruitment of a longitudinal Consumer Panel. For the purposes of the study, all panel members would be clearly identifiable as extant multichannel consumers, defined operationally in this context as being those individuals who had been purchasing apparel products via store, catalogue *and* Internet channels, albeit to varying degrees, for at least 18

months prior to the onset of data collection; a criterion that would hopefully serve to control for any initial innovation biases associated with recent adoption of a novel mode of purchase.

An analysis of the *Next* customer database revealed that the North-East of England would be an appropriate geographical region within which to recruit the Consumer Panel required, a territory close to the UK average in respect of the proportion of purchases extant multichannel consumers were then making via *Next*'s three principle marketing channels; i.e. store, catalogue and Internet. The Group Marketing Division subsequently contacted some 500 customers residing in the North-East satisfying the operational descriptor of a multichannel consumer, inviting them to participate in research exploring customer experiences of shopping for clothing products. 178 positive expressions of interest were received, applicants being screened on key demographic characteristics in order to obtain a representative cohort, specifically: age, level of education, occupation, level of income, marital status, and number of individuals in household. In addition to these standard demographic criteria (Burns & Bush, 2002), three further participant selection variables were also utilised: (1) self-reported estimates of current IT skills, to avoid any potential recruitment biases toward 'technophiles'; (2) urban-rural domicile, to overcome any geographical accessibility barriers that may result in over or under reliance upon direct marketing channels; and (3) participant credit status, a variable similarly designed to control for any potential socio-economic barriers to participation in online shopping activities in light of the impracticality of purchasing goods electronically without a valid debit or credit card.

At this point in the discussion, however, it is important to recognise a key potential limitation in the current research arising as a result of this sampling process. Of the 178 positive expressions of interest received by the Group Marketing Division, none of the volunteers forthcoming proved to be male and it quickly became apparent that only a single-sex female Consumer Panel would prove operationally viable. On one level, this is perhaps unsurprising given that, at the time of sampling, almost 70% of the retailer's customers were female anyway, male customers typically being confined to two distinct market segments: spouses of female customers in the 25-45 age group, and young single males in the 20-35 age group. More generally, the difficulty also reflected similar problems experienced by *Next* itself in its own previous marketing research activities, the retailer finding it very difficult to interest male consumers in participation in survey and focus group work in the past due to the brand's strong association with female high street fashion goods.

After careful deliberation, it was decided to proceed with the empirical work on the basis of a single-sex all-female Consumer Panel, albeit with the crucial qualifier that no firm conclusions could be drawn in respect of the behaviour patterns of male consumers on the basis of any results obtained. On a practical level, it was considered that even a single-sex study of this nature held a capacity to yield significant insights into the environmentally-contingent behaviour

patterns of retail consumers in both physical and virtual consumption settings and to contribute to the ontological and epistemological development of the radical behaviourist approach to consumer research. More philosophically, perhaps, it could also be strongly argued that a single-sex study is wholly consistent with the central tenets of radical behaviourism and Skinnerian behaviour analysis, given that the primary objective is to better predict and control the behavioural responses of the participants involved and *not* to infer that the observations made are in any way indicative of the likely corresponding behavioural responses of individuals beyond the participant grouping; i.e. general laws may emerge through repeated behaviour analyses of a similar nature, but this is secondary to the fundamental aim of constructing a viable account of the behaviour of current research participants via systematic application of the three-term contingency as an organising technology. Thus, both conceptually and empirically, there was potentially much to be gained from the decision to proceed with a single-sex longitudinal study. Nevertheless, the all-female composition of the Consumer Panel must be acknowledged as a not insubstantial limitation in the empirical design and taken into consideration when relating any observations made to the extant consumer research literature – an aspect of the research that will be explored further during the subsequent discursive chapters of this thesis.

Once the decision had been taken to proceed with the research using a female-only cohort, 48 volunteers were selected as Consumer Panel members on the basis of the screening criteria outlined above, *Next* providing financial incentives to continuing participation via regular payments in the form of retail gift vouchers, issued retrospectively in order to minimise any possible influence upon participant buying patterns. As a consequence of these incentives, some 30 volunteers remained panel members at the study close. Only data from this stable core membership is included in the thesis' data analyses which follow in order to ensure that the observations reported are made only on the basis of a complete longitudinal data set from each participant.

Having recruited an appropriately representative female Consumer Panel, the next decision facing the researcher was to determine the general strategy to be adopted for data collection and analysis. It will be recalled that the methodological strategy of applied behaviour analysis is based on the pragmatic-positivist premise that a scientific account of behaviour is possible and that it must be conceptually expedient in order to minimise the generation and/or proliferation of "explanatory fictions". Within the radical behaviourist literature, this is typically achieved via the application of standardised metrics of independently observable acts of behaviour, augmented where necessary by means of more qualitative accounts of events generated through interpretation that must, nonetheless, be formed purely on the basis of a series of objective, rigorous and concurrent independent observations (Bolles, 1979; Foxall, 1995b, 1997c; Mowrer, 1960). With these guiding principles in mind, the present research therefore adopted a mixed-

methods approach to data collection, employing a combination of both quantitative and qualitative techniques.

Yet, within social scientific research, there is a tendency to apply the adjective "mixed-methods" in a somewhat loose manner, denoting any empirical work that employs quantitative and qualitative data collection procedures within a single research programme. A consumer psychologist interested in attitudes toward Internet shopping, for instance, may conduct a large-scale quantitative survey in order to obtain statistical metrics of general attitudes within the population, then proceed to convene a series of more qualitative focus group discussions to shed light upon the nature of any attitudinal trends evident in the statistical data. The underlying assumption of such an approach is that the quantitative phase endeavours to *measure* a particular behaviour, whilst the qualitative phase seeks to *explain* that behaviour. Within the context of this thesis, however, the empirical work undertaken was a more literal application of the "mixed-methods" descriptor. That is, the favoured method of data collection was quantitative throughout, the objective being to obtain direct metrics of multichannel consumer behaviour, and the role of core BPM elements in that behaviour, wherever possible. Where *direct* quantitative metrics were not practical, the research strategy adopted a more *indirect* interpretive approach to data collection, albeit conducted in a manner consistent with the radical behaviourist emphasis upon impartiality and concurrency of observations/interpretations, the qualitative material accrued during the course of such observations/interpretations subsequently being converted to quantitative data in order both to verify the the degree of observational concurrency achieved and to render the data consistent with those metrics obtained via more traditional and direct quantitative means. In other words, within the context of the present study, the descriptor of "mixed-methods" is applied in a more specific sense, highlighting the fact that, at times, a single set of statistical data may be the output of both qualitative and quantitative interpretation/measurement (Breakwell, Hammond, & Fife Shaw, 2000; Cloke et al., 2004; Cresswell, 1994; Foxall, 1995b; C Goulding, 1999; Hirschman & Holbrook, 1986; Stone, 1978).

Details of the precise research methods employed follow in the remainder of this chapter. However, the overall strategy adopted may perhaps best be described as being reliant upon the concept of the Shopping Diary as an overarching empirical tool.

Diary techniques have been a recurrent theme in social scientific research and a prominent feature of consumer panel studies for over half a century. In its most general sense, a diary may be defined as a self-report instrument used to capture and examine everyday experiences, generating rich pseudo-ethnographic data that may be analysed via both quantitative and qualitative means. In their loosest form, diaries may quite literally represent the personal journals kept by individuals over a substantive timeframe, the analysis of which has figured prominently within historical research. As the methodology has evolved, however, social scientists have

gradually come to favour the adoption of more structured diary formats for longitudinal application in both time-based and event-based research designs. Whatever the format employed, however, diaries are seen as a highly effective means of collecting rich personal data at the individual level of analysis that is grounded in the social and cultural contexts within which the diarist is located, although caution must be exercised in their analysis and interpretation due to the highly subjective and 'self-edited' nature of the material individuals typically elect to record and to avoid subjective biases on the part of the researcher (Ader & Melenbergh, 1999; Bolger, Davis, & Rafaeli, 2003; Diggle & Liang, 2001; Grootaert, 1986; Hox, 2002; Kenny, Kashy, & Bolger, 1998; McKenzie, 1983; Morrison, Leigh, & Gillmore, 1999; Moskowitz & Hershberger, 2002; Reis & Judd, 2000; Skowronski & Betz, 1991; Stonborough, 1942; Sudman & Ferber, 1971; West & Hepworth, 1991; Wheeler & Reis, 1991).

In order to begin the diary development process, a series of exploratory focus groups were convened among Consumer Panel members. The principal objectives of the focus groups were: (a) to inform the construction of the Shopping Diary itself; and (b) to similarly inform the development of the individual proposition-derived measures comprising that diary. The focus groups themselves were convened in areas accessible to clusters of panel members, with due consideration being paid to convenience, timing, ambience and general participant comfort. Each session was attended by 6-8 panel members and moderated in a semi-formal and inclusive style. The duration of each focus group session was approximately 90 minutes, discussion centring initially around the format and style of the proposed diaries, proceeding to refine the measures to be included within the diary and to clarify both the requirements for completion and any key terms involved within the diary text. Two non-participating postgraduate students attended the focus group sessions, both experienced in recording such proceedings in textual form and fully briefed by the researcher as to the session objectives.

In consultation with the focus group participants, it was decided that a monthly Shopping Diary would be appropriate for the research design, the eighteen-month data collection period permitting a total of 18 diaries to be collected from each panel member. Participants felt that this was a realistic demand to place upon their time and it was agreed with *Next* that a payment of £10 would be made upon receipt of each completed diary by way of an appropriate financial incentive. It was also agreed that the data collection process would not be confined to *Next* shopping episodes but, rather, would seek to model all apparel purchasing activities the panel may engage in.

In respect of the actual form that the Shopping Diary would take, this was very much influenced by the measures to be accommodated. As this was a longitudinal study of multichannel shopping, the first demand of the diary would clearly be for the inclusion of some metric of consumer channel usage during the monthly period a particular diary spanned. It was decided

that the most effective means of achieving such a metric would simply be to begin the diary by asking participants to record their apparel purchasing activities via each of the three retail channels of interest (store, catalogue, Internet) during the period since the previous diary was submitted. In the case of the first diary, it was agreed that this would be issued four weeks prior to submission and the purchase metrics would relate to channel usage during that four-week period. Initially, it was anticipated that these purchase metrics would take the form of spending level estimates by purchase channel. However, during the course of the focus group discussions, it quickly became apparent that spending levels in monetary terms would be an inappropriate metric to employ. For example, one consumer remarked that she had spent over £300 online in the week preceding the focus group she attended, but only around £100 on other apparel products in the past month. However, the £300+ spend actually related to a new suit for work, whilst the £100 involved numerous purchases made during frequent visits to the post-Christmas retail sales. This was by no means an uncommon story to emerge during the course of the focus group sessions and, with this in mind, it was therefore decided to construct the channel tracking metrics on the basis of the *number* of apparel purchases made via each available channel in a calendar month, rather than on the monetary value of those purchases.

The second requirement of the Shopping Diary would prove more challenging to develop. The requirement was for some means of analysing the behaviour patterns of Consumer Panel members in respect of a variety of BPM-derived concepts, ranging from the particular operant classes of behaviour associated with a shopping act through to the influence of all of those retail setting variables exerting influence upon the channel selection process in any given shopping situation. Given these diverse data collection requirements, any overly-structured form of diary that was pseudo-questionnaire in format would clearly be inappropriate, such an approach being both time-consuming to complete (and thereby serving as a disincentive to continuing participation) and running the risk of imposing some pre-determined organisational structure upon the data with the effect that important facets of the shopping process were overlooked. In respect of this latter point, this was a particularly important consideration in view of the fact that the radical behaviourist paradigm is vehemently opposed to the imposition of formal theoretical models upon data where the outcome may be to perpetuate some "explanatory fiction".

In the search for a solution to this problem, it was decided to adapt a technique applied by Brown and Reid (1997) in their seminal study of shopping apathy in the North-East town of Hartlepool, the technique itself drawing extensively upon previous work by Rook (1985b), Holbrook (1995) and Hassay and Smith (1996). Based on the principal of personal introspection, Brown and Reid collected some 55 accounts of individual shopping episodes from a sample of student consumers, each account effectively taking the form of an individual essay in which the participant involved merely recounted a single day's shopping in his or her own words and in as

much detail as (s)he deemed appropriate. In the case of the Hartlepool study, the essays accumulated proved rich in content in terms of both objectivist and subjectivist aspects of the shopping experience and, indeed, the subsequent content analysis of the material by Brown and Reid saw the natural emergence of variables in precisely the five Belkian categories of situational influence (Belk, 1975) that served as a basis for this study's taxonomy of behaviour setting variables developed in Chapter Two.

Drawing upon the experiences of Brown and Reid, the Shopping Diary constructed for the present study therefore included a substantial component whereby Consumer Panel members could record their shopping experiences in a 'free-flow' format. Specifically, in consultation with focus group attendees, space was allocated within the diary for participants to document shopping episodes in as much detail as possible and in any narrative form the individual diarist felt comfortable employing. However, in view of the time required to undertake such a narrative exercise, it was agreed that an event-based approach to the research would be adopted, panel members recording only one shopping episode of their own choice each month; a strategy that would hopefully yield more detailed accounts of participant shopping experiences and in a form that would be suitable for subsequent content analysis via both quantitative and qualitative means in order to explore the research propositions underpinning this thesis. The diary developed is reproduced for reference in *Appendix I.*

Within the context of the present study, then, the final Shopping Diary in fact took the form of a semi-structured data collection instrument, administered at monthly intervals over an eighteen-month period between 2002 and 2003, some 18 completed diaries being accumulated from each of the 30 Consumer Panel members completing the research programme. The aim of the diary was to facilitate the collection of both quantitative tracking metrics and more qualitative narrative material (suitable for subsequent interpretation and quantification), the four key propositions formulated in Chapter Two serving as a basis for the implementation and analysis of the diary material:

P_1: Different retail purchase channels are associated with different operant classes of consumer behaviour.

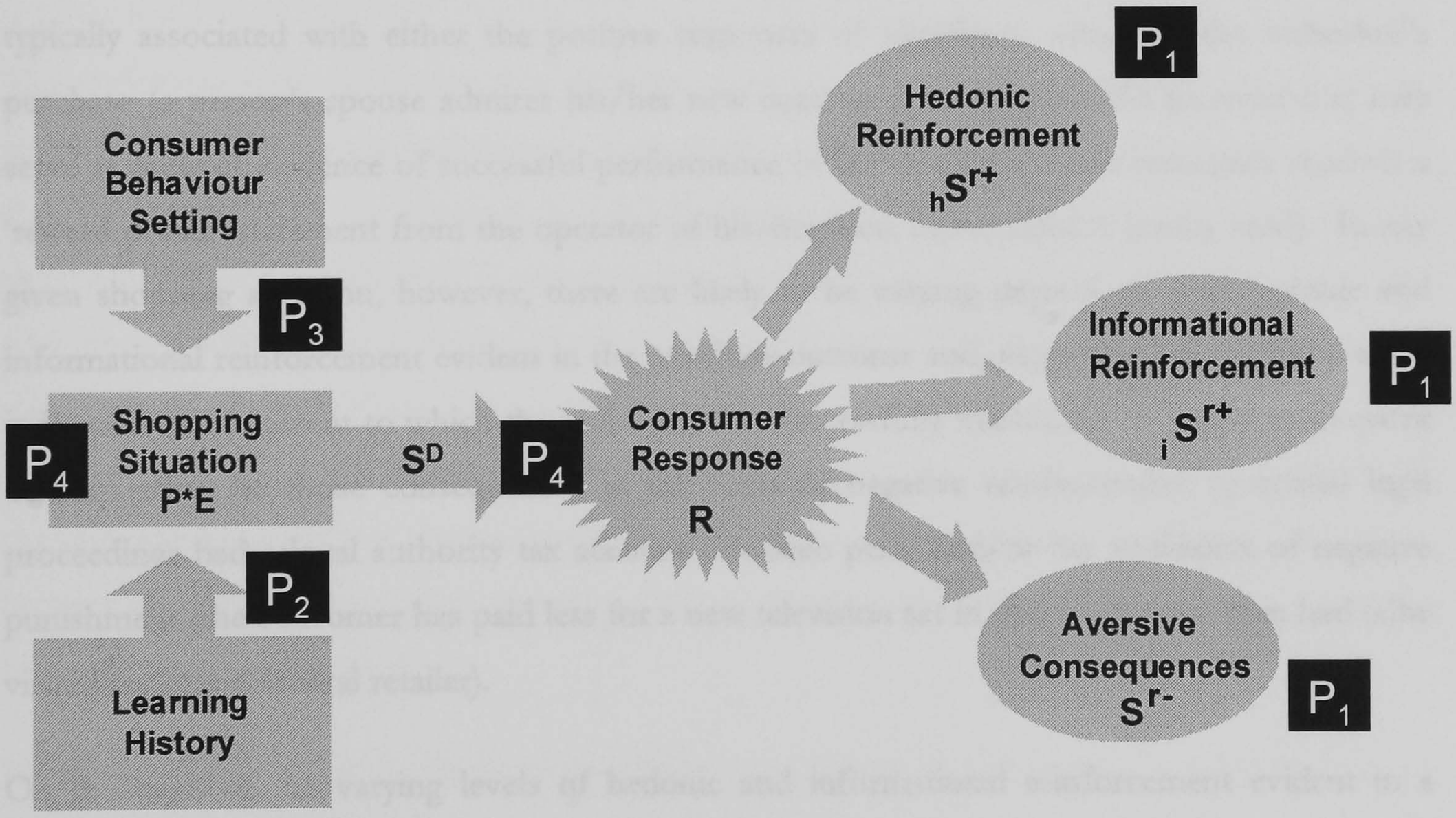
P_2: The extent to which an individual utilises an available purchase channel will vary depending upon her own unique learning history of previous encounters with that channel and their reinforcing outcomes.

P_3: Different retail purchase channels are associated with the influence of different setting-derived discriminatory stimuli.

P_4: Different retail purchase channels will be favoured in different shopping situations.

In many respects, however, the above propositions can be regarded as cumulative, rather than independent. Specifically, the first three investigate the existence and contribution of particular BPM elements/processes in consumer purchase channel usage: P_1 examines the extent to which contingencies of reinforcement lead to the association of particular purchase channels with particular classes of operant behaviour; P_2 extends this emphasis upon prior experience, exploring iterative changes in channel usage as a function of the individual learning history of past behaviour-outcome associations; and P_3 investigates the transformation of behaviour setting variables into discriminative signals of current potential behaviour-outcome associations via the application of that ontogenic learning history. Finally, P_4 represents a consolidation of the three previous research propositions, seeking to relate the eight hypothesised retail shopping situations to specific patterns of channel usage by virtue of the application of a learning history upon a behaviour setting in pursuit of a maximisation of positive reinforcing outcomes and/or minimisation of likely or associated aversive consequences. Thus, by way of illustration, all four propositions may be usefully schematically integrated within the constituent BPM elements/processes as depicted in the annotated BPM diagram below (**Figure 6**).

Figure 6: Annotated BPM Framework



The above schematic representation both summarises the operant interpretation of consumer behaviour inherent in the BPM approach to applied behaviour analysis and the specific research propositions formulated in order to evaluate the applicability of that approach in the study of multichannel consumer behaviour. The remainder of this chapter therefore documents the

procedures via which quantitative metrics were developed in an attempt to obtain statistical evidence in support of the four research propositions, the interpretation and implications of the said statistical evidence following in Chapter Four.

Operant Behaviour and Channel Usage

P_1: Different retail purchase channels are associated with different operant classes of consumer behaviour.

The first research proposition formulated concerned potential differences in those purchase channels associated with different operant classes of behaviour. As will be recalled, the principal function of any behavioural response emitted by the consumer is to maximise the likely positively reinforcing consequences of that response. Positive reinforcement itself, however, is subject to bifurification and, as a consequence, may take one of two forms. Hedonic reinforcement may be said to have occurred where the consequences of an individual's actions quite literally result in pleasure/satisfaction, derived from either the purchase or consumption of the goods acquired (e.g. purchasing a cinema ticket and enjoying the movie viewed) or, alternatively, from the goods themselves being deemed to be direct evidence of successful performance of the shopping act (selecting a 'stain-removing' product that subsequently removes a stain from a sofa as claimed on its packaging). Informational reinforcement, on the other hand, is more subtle in nature and is typically associated with either the positive responses of significant others to the individual's purchase (a person's spouse admires his/her new coat) or from information received that may serve as indirect evidence of successful performance of the shopping act (a consumer receives a 'reward points' statement from the operator of his/her local supermarket's loyalty card). In any given shopping situation, however, there are likely to be varying degrees of both hedonic and informational reinforcement evident in the purchase outcome and, moreover, there will be some indication of the extent to which the individual has successfully minimised the threat of aversive consequences, be those consequences in the form of negative reinforcement (potential legal proceedings had a local authority tax account not been paid) and/or the avoidance of negative punishment (the consumer has paid less for a new television set in one retail store than had (s)he visited another electrical retailer).

On the basis of the varying levels of hedonic and informational reinforcement evident in a shopping situation, Foxall (1994) has proposed that four distinct operant classes of behavioural response may be identified:

> ***Maintenance Shopping:*** the consumer is acquiring/replenishing basic needs only (food, shelter, everyday clothing, etc.) and satisfying his/her minimal obligations to the current social system (e.g. paying taxes). Such classes of behaviour are low in both hedonic reinforcement and informational reinforcement; indeed, it is often the case that

negative reinforcement is in operation too, non-payment of taxes holding a potential to be punished.

Accumulation Shopping: still low in hedonic reinforcement, but informational reinforcement is more pronounced. Such behaviour classes typically involve activities such as hire-purchase shopping, collecting, investment, savings, etc. For instance, in the case of a regular savings plan, monthly interest statements may serve to regularly reinforce the saving activity.

Pleasure Shopping: more indulgent, being high in hedonic reinforcement but relatively low in informational reinforcement. Such classes of behaviour might include the consumption of popular entertainment products and services, such as buying a CD/DVD or subscribing to a pay-TV service, where the enjoyment derived tends to be a largely private phenomenon.

Accomplishment Shopping: high in both hedonic and informational reinforcement. This class of behaviour typically involves all of those activities subsumed under the general heading of conspicuous consumption; not only does the consumer derive personal pleasure from such expenditure, (s)he also enjoys a degree of social and economic status as a result of the public consumption of high-status goods, brands, etc.

The underlying logic of P_1 was that different retail purchase channels may be associated with different operant classes of behaviour as a result of the particular patterns of reinforcing outcome they typically yield. For instance, the much-reported preference for mall-based shopping in situations where the consumer is accompanied by friends (e.g. when searching for an outfit to wear on a special occasion) might indicate that this particular retail format is strongly associated with pleasure or accomplishment shopping, whilst the rapid expansion in consumer adoption of Internet banking services may similarly be regarded as suggesting that electronic and remote retail channels are favoured in maintenance or accumulation shopping situations. Different patterns of hedonic and informational reinforcement, different patterns of channel usage in order to achieve those reinforcing outcomes.

In order to explore this particular proposition, some means of assessing a consumer's operant class of behaviour during a shopping episode was thus required, which could then in turn be used to investigate any potential association of that behavioural class with the specific channel(s) used during that shopping episode. In terms of both operant class evaluation and associated mode of purchase, however, no easily identifiable metric was available. In the tracking data of a single Shopping Diary, for instance, an individual consumer may report, say, 8 store-based, 4 catalogue-based and 2 Internet-based purchases in a monthly diary cycle, but then proceed to document

one of the minority Internet-based shopping episodes in the essay-style section of her diary return. A more indirect form of metric was therefore clearly required.

To address this difficulty, the research relied upon the technique of quantitative content analysis in order to determine both class of operant behaviour and associated mode of purchase. Content analysis is a long-established methodological procedure in the social sciences and may be defined as *"the objective, systematic, and quantitative description of the manifest content of a communication"* (Berelson, 1952, p55). In essence, the primary aim is to quantify the latent and/or manifest content of a textual form via the systematic, objective and rigorous evaluation of that content by two or more concurrent independent observers (Holsti, 1969, p3). As such, it is wholly consistent with the pragmatic-positivist view of interpretive research outlined above. Content analysis may take a variety of forms, ranging from hypothesis-testing and inferential statistical analysis, through to theory-building and theory-confirming; in the present study, however, the form of content analysis employed was more interpretive in nature, the goal simply being to describe the data obtained by reference to the classic Skinnerian three-term contingency, with no attempt at generalisation being made to the broader population (Lijphart, 1971).

Content analysis has featured prominently in the marketing and consumer research, albeit somewhat spasmodically and subject to various methodological 'fads and fashions'. In a comprehensive review of the literature, however, Kassarjian (1977) concluded that, when used appropriately, the technique had enormous potential for generating meaningful data, provided researchers paid due attention to recurrent problems associated with successful application of the technique in respect of objectivity, reliability, validity and systematic implementation of data collection methods; a conclusion strongly supported by Kolbe & Burnett (1991) on the basis of their own meta-analysis evaluating the predictive power of data accrued during the course of some 128 subsequent (i.e. post-Kassarjian) studies.

Drawing upon the reviews of Kassarjian and of Kolbe and Burnett, a content analysis procedure was developed with the aim of addressing precisely those weaknesses identified by the said authors in the extant literature. The object of the exercise was to engage with the completed diaries and identify: (a) the mode of purchase employed in each documented shopping episode; and (b) the operant class of behaviour depicted in the narrative. The first objective was relatively simple to achieve, a diary being coded purely on the basis of whether an end purchase was made via a physical store, a mail-order catalogue or a retail Web site. Employing this simple categorical technique could also accommodate multichannel buying through multiple coding; e.g. where a consumer bought, say, a skirt in a store and then ordered a matching jacket online, this would be 'double-counted' as a store-based purchase and an Internet-based purchase.

The second objective – identification of the operant class(es) of behaviour involved – was somewhat more problematic, necessitating a deeper engagement with both the manifest and the latent contents of a completed diary in order to ascertain the meaning of the shopping episode to the individual consumer concerned; i.e. was this maintenance, accumulation, pleasure and/or accomplishment shopping? In order to tackle this problem, it was decided to employ two diary analysts to interpret and code the documents. The two analysts concerned were both postgraduate students with a high degree of familiarity with the extant BPM literature, able to draw upon their own knowledge and experience of the potential operant classes of behaviour available and make an informed judgement as to the nature of the shopping episode documented.

To assist the analysts, the descriptors of the four operant classes developed by Foxall (1993) were provided. Extensive training in the precise requirements of the research was also provided, the analysts coding some 20 essays depicting a shopping episode written for this purpose by a group of undergraduate student volunteers. The aim of this pilot was to ensure that the analysts approached the coding process in a uniform and systematic manner, and to achieve a degree of construct validity in respect of the actual codes employed by virtue of the analysts' particular knowledge of, and familiarity with, the extant literature (Schutz, 1958). The Foxall descriptors, together with the accompanying instructions given to the diary analysts, are reproduced for reference in *Appendix II*.

As noted earlier, the present study involved the content analysis of the Shopping Diaries of some 30 participants completing the study over an eighteen-month period. Of the total of 540 possible completed diaries from the Consumer Panel, 379 were actually received, each participant on average failing to return around 5 diaries during that period. Some of the nil returns were attributable to sickness, holidays, etc. However, upon further investigation, it emerged that some consumers were also failing to submit a diary because they had not in fact made a purchase during a particular monthly cycle; others, by contrast, would submit a diary documenting a shopping episode, even though that episode may not have resulted in an actual purchase being made.

Once the training process had been completed, the analysts were asked to independently code the 379 completed diaries submitted by the Consumer Panel in terms of both purchase channel employed and operant class of behaviour. 53 diaries were immediately excluded at this stage, no actual purchase having been made during the course of the particular shopping episodes the respondents had documented.

As both Kassarjian and Kolbe and Burnett observe, however, a key requirement of any quantitative mode of content analysis must be to establish the reliability of the coding process itself before proceeding to data analysis. After Perreault & Leigh (1989), the *coefficient of agreement*

method was therefore employed, the number of agreed coding outcomes obtained from the observers (295) being divided by the total number of potential agreements (326) to achieve an index of reliability in the 0-1 range. The computed coefficient of agreement was thus 0.904. Given that "inter-judge" reliability is generally considered acceptable where the coefficient of agreement is >0.80 (e.g. Hughes & Garrett, 1990; Insch, Moore, & Murphy, 1997; Kolbe & Burnett, 1991; Lewis, Snyder, & Rainer, 1995; Metha & Plaza, 1997; Perreault & Leigh, 1989; Waskul & Douglass, 1997), the coding system employed in this study can therefore deemed to be reliable. The 295 diaries where agreement between the two analysts had been obtained thus constituted the final data set for analysis, having satisfied both standard reliability criteria and, more importantly perhaps, being the product of concurrent independent observations as demanded by the central tenets of Skinnerian behaviour analysis.

The outcome of the above coding exercise was a classic 4x3 contingency table, depicting frequency counts of shopping episodes coded according to operant class of behaviour by purchase channel respectively (**Table 4**).

Table 4: Analysis of Operant Class by Purchase Channel

Operant Class * Purchase Channel Crosstabulation

			Purchase Channel			Total
			Store	Catalogue	Internet	
Operant Class	Maintenance	Count	26	17	32	75
		Expected Count	46.0	11.4	17.5	75.0
	Accumulation	Count	29	10	22	61
		Expected Count	37.4	9.3	14.3	61.0
	Pleasure	Count	79	10	8	97
		Expected Count	59.5	14.8	22.7	97.0
	Accomplishment	Count	47	8	7	62
		Expected Count	38.0	9.5	14.5	62.0
Total		Count	181	45	69	295
		Expected Count	181.0	45.0	69.0	295.0

At this point in the process, however, a dilemma arose in terms of how the researcher should proceed to analyse the data described in the contingency table. The traditional method of determining whether there were any differences in the operant class of behaviour observed according to the mode of purchase employed would involve some form of statistical analysis of the resultant contingency table; specifically, given that the data accrued is at the nominal level only, an analysis would typically be undertaken by means of a non-parametric statistical test of significance in order to test an appropriate experimental hypothesis against its corresponding null hypothesis. The problem facing the researcher, however, lay in the fact that radical behaviourism

is especially critical of the use of the hypothetico-deductive method in general, and of the use of inferential statistical tests in particular (Delprato & Midgley, 1992; Malone & Cruchon, 2001; Skinner, 1974, 1988a).

Thus far, the dilemma outlined above has been largely ignored in the BPM literature, even by Foxall himself, the instigator of the BPM research programme. On the one hand, for instance, Foxall (1995b) presents a detailed account of the radical behaviourist paradigm and the central tenets of the Skinnerian view of science, with particular emphasis upon the pragmatic positivist rejection of the hypothetico-inductive method. In several papers documenting BPM-derived empirical work, however, the author proceeds to employ precisely that hypothesis-testing and use of inferential multivariate techniques so despised by Skinner (e.g. Foxall, 1999a, 1999b; Gordon R. Foxall & Gordon E. Greenley, 1999; Foxall & Yani-de-Soriano, 2004; Leek et al., 2000; Newman & Foxall, 2003; M.Y. Soriano et al., 2002). Indeed, in Soriano et al. (2002), the authors even proceed to use the technique of multiple discriminant analysis to test BPM-derived hypotheses! The two positions are, this thesis would argue, clearly contradictory and irreconcilable, violating the central tenets of the radical behaviourist approach to empirical inquiry. Given the absence of clear guidance available in the extant literature, an informed choice was therefore necessary as to the 'best fit' strategy to employ in the present study for the purposes of quantitative data analysis.

The final decision was taken on the basis of the core philosophy espoused by Skinner himself: namely, that quantitative data analysis based on independent observations of events was the preferred methodology but, at times, the metrics employed would required augmentation via a systematic interpretation of those events in order to construct an economical and viable explanation of the behaviour being analysed. On this basis, the use of quantitative metrics and an appropriate statistical test *was* deemed to be acceptable, provided that it was not used to verify/falsify a specified hypothesis and that the test was not used to generalise the results observed to the wider population.

To elaborate, the normative role of a statistical test in the behavioural sciences is to establish the significance or otherwise of the results obtained in an experiment. The statistical coefficient in question is expressed by reference to its so-called accompanying *p* value; the probability that a statistic of the observed magnitude is not a result of the effects of the specified independent variable (IV) upon the dependent variable (DV), as predicted in the experimental hypothesis, but, rather, is an artefact of some unknown, random or chance effect, as predicted in the corresponding null hypothesis. If the observed value of *p* is less than some pre-specified convention, normally 5% ($p < .05$), then the null hypothesis is rejected and the data obtained are assumed to be a result of the effects of the IV upon the DV. Moreover, on this basis, it is inferred that the data obtained from the current sample is representative of the broader

population from which the sample is drawn; hence the term *inferential* statistical test (Breakwell et al., 2000; Burns & Bush, 2002; Coolican, 2000; Greene & d'Oliveira, 2002).

Within the context of the present study, this traditional view of the use of statistical testing is inconsistent with orthodox Skinnerian thinking. In radical behaviourism, no attempt is being made to infer that any results observed are applicable beyond the current experimental procedure; general laws may emerge as a consequence of subsequent replications/observations, but this is not the primary goal of the experiment. In other words, in radical behaviourism, *there is no sample to draw inferences from because the participants in the study effectively constitute the total population under investigation.* It would, therefore, be wholly inappropriate to apply a statistical test in any inferential way.

This does not, however, preclude the use of a statistical test *per se.* To return to the issue of the *p* value for a moment, a simpler way of conceptualising this particular value is to return to its roots in probability theory. Specifically, when a researcher claims that the result of a statistical calculation is significant at a level of 5% or less ($p < .05$), what (s)he is actually saying is that it is probable that the result in question would occur on no more than five occasions out of one hundred. With this in mind, the researcher then rejects the null hypothesis and, in effect, signals that (s)he is prepared to take the risk and assume that the result observed is a product of the effects of the IV upon the DV (Howitt & Cramer, 2000; Wyner, 1993). Seen from this perspective, it can therefore be argued that use of a statistical test in a Skinnerian research design *is* justifiable where the investigator wishes to perform a probability calculation in respect of results obtained from his/her experimental population, provided that no attempt is made to extrapolate beyond that population.

On this basis, the decision was taken to proceed with the use of statistical procedures in the current empirical work. However, it must be emphasised that the use of such procedures was intended to *inform* the evaluation of research propositions, rather than to *test* those propositions as though they were traditional experimental hypotheses. That is, the use of statistical tests in this study was *exploratory*, rather than *confirmatory*, the goal being merely to identify and understand patterns and/or trends in the quantitative data by reference to probability theory as but one stage in the overall evaluation of a particular research proposition.

The final point above is crucial. In this study, the emergence of a "statistically significant" result from any parametric or non-parametric analysis did not *de facto* mean that the particular research proposition being investigated would be accepted. The radical behaviourist approach to inquiry demands that not only are independent and impartial metrics obtained but, also, that the subsequent explanation of the behavioural patterns identified on the basis of those metrics is consistent with the operant interpretation of behaviour. Thus, for any research proposition to be

deemed a viable explanation in radical behaviourist terms, the data must not only be significant (at least from the perspective of probability theory), it must also be consistent with the classic Skinnerian three-term contingency in order to minimise the possibility of an alternative explanation being valid for the results observed. Put another way, any outcomes of statistical analyses reported in the account of the empirical work which follows were assumed to be *contributory* evidence only, not final arbiters of the overall viability of the explanatory propositions formulated.

In respect of the evaluation of P_1, and the anticipated association between operant class of behaviour and mode of purchase, analysis of the 4x3 contingency table proceeded with the application of an appropriate statistical test in order to explore and identify any patterns inherent in the frequency data that may or may not be consistent with the radical behaviourist interpretation of consumer behaviour. Specifically, given that the data recorded were at the nominal level only, the research employed the non-parametric Chi-square 'goodness of fit' test in order to establish whether there were any apparent differences evident in the purchase channels adopted by consumers in the experimental population as a function of the operant class of behaviour being engaged in. The results of that Chi-square analysis are depicted in **Table 5** below.

Table 5: Chi-Square Analysis of Operant Class by Purchase Channel

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	53.122[a]	6	.000
Likelihood Ratio	55.186	6	.000
Linear-by-Linear Association	42.038	1	.000
N of Valid Cases	295		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.31.

As the analysis in **Table 5** illustrates, the results of the Pearson Chi-square test were significant ($\chi_2 = 53.122$, $p<.001$, $df=6$). The data from the content analysis of the diaries thus support the research proposition under investigation and may therefore serve as a basis upon which to subsequently construct a more interpretive account of channel usage, to be documented in Chapter Four.

Channel Usage and the Learning History

> *P_2: The extent to which an individual utilises an available purchase channel will vary depending upon her own unique learning history of previous encounters with that channel and their reinforcing outcomes.*

The second research proposition focused upon the learning history of the individual. The BPM framework detailed in Chapter Two asserts that, in any given purchase situation, the individual's responses to environmental stimuli and available choice options will be in part determined by his or her own unique repository of previous encounters with identical or similar purchase situations and their learned reinforcing outcomes. Put another way, within the context of this study, the shopping behaviours of panel members would be anticipated as being both iterative and developmental, channel usage patterns varying over time as a function of past experience. Unfortunately, however, the construct of the learning history has proven the most elusive of all BPM elements to quantify and, indeed, as of 2004, only one serious attempt to measure that learning history construct could be identified in the literature.

In their paper *Situational determinants of fish consumption*, Leek et al (2000) seek to apply the BPM framework to explore the responses of a sample of UK consumers (N=311) to a 'healthy eating' campaign aimed at promoting fish. The situational factors exerting influence upon consumers are identified by means of a series of qualitative focus group discussions, whilst metrics such as purchase frequency rates are employed as measures of consumers' actual behavioural outcomes. It is, however, the operationalisation and quantification of the consumer learning history that is of particular interest here.

After Foxall (1998b), Leek et al. argue that consumer attitudes toward an object provide an indirect metric of past encounters with that object. That is, the prior learning history of encounters with an object and their resultant reinforcing outcomes, acquired both directly and via non-verbal means, will be brought to bear in the verbal behavioural responses of individuals in situations where they are asked to evaluate the object under investigation. More specifically, the authors suggest that a consumer's attitudes toward fish are shaped by past encounters with fish, the positive and/or negative outcomes of buying and consuming fish being evident in the consumer's present attitudes toward the product. The proposed method for quantifying the learning history is thus an attitude survey, the basic argument being that completing a questionnaire is an act of behaviour in its own right, albeit an act of verbal behaviour, and that the responses the individual gives to attitudinal statements in that questionnaire will therefore be in part determined by past experience of the attitude object being measured.

The approach adopted by Leek et al is interesting and the proposition that completing a questionnaire about fish purchases will be influenced by past fish purchases holds a certain intuitive appeal. There is, however, a major potential weakness in that argument. Specifically, the

precise relationship – if any – between the attitudes an individual holds and his/her actual observable behaviour can, at best, perhaps be described as equivocal.

In the 1930s, La Piere (1934) famously demonstrated a very weak correlation between actual incidents of racial discrimination toward two Chinese academics by hoteliers and restaurateurs and a subsequent survey of xenophobic attitudes among those proprietors, opening the floodgates for the emergence of a vigorous and protracted literature on the nature of the attitude-behaviour relationship. Subsequent research has sought to identify the precise factors contributing to such weak statistical correlations, such as the manner in which items are worded on attitudinal questionnaires and the extent to which the behaviours being correlated represent metrics of either one-off 'snapshot' incidents or an aggregation of events (Davidson & Jaccard, 1979; Fishbein & Ajzen, 1974).

Within the specific field of marketing and consumer research, there has been a long tradition of employing attitudinal surveys as measures of, say, advertising effectiveness or as market segmentation variables, the evidence here too being similarly unclear. Ryan and Bonfield (1975), for instance, report that measures of a consumer's attitudes toward the actual act of purchase generates a far stronger correlate of observed behaviour than measures of attitudes toward a particular product or service. Similarly, a consumer's attitudes toward a branded product advertised on TV appears to be a weaker predictor of subsequent purchasing than his/her attitudes toward the actual TV programme within whose commercial break the product was advertised (Murry, Lastovicka, & Singh, 1992). Moreover, sudden dramatic changes in personal circumstances or exposure to powerful media messages can result in an immediate change in attitudes and/or an impulsive act of consumption that correlates *negatively* with an individual's normative attitudinal measures to a statistically significant level of probability (Cote, McCullough, & Reilly, 1985). Overall, the empirical evidence on attitude-behaviour relationships is thus somewhat inconclusive and, at times, even highly contradictory. Indeed, in two recent reviews of the literature, both Potter (1996) and Solomon, Bamossy and Askegaard (2002) conclude that, at best, attitudes should be regarded as general *indicators* of how a person might behave in a particular situation, not as absolute *predictors*, any effect upon behaviour being substantively moderated via a broad spectrum of extrinsic and intrinsic variables.

To be fair to Leek et al., the above qualifiers do not preclude the use of attitudinal measures as indicators of the content and influence of an individual's idiosyncratic learning history. Indeed, it is a central tenet of the BPM framework that any influence of that learning history upon a particular purchase decision will be considerably tempered by an array of environmental variables operating at both the proximal and distal levels. Nevertheless, in view of the somewhat inconclusive nature of the available empirical evidence, this thesis would argue that to rely solely upon the use of attitudinal measures as indices of learning history effect may be somewhat

unwise – particularly given that many of the theoretical frameworks from which such measures are derived have a tendency to conceptualise attitudes as cognitive evaluations of an object in a mentalistic manner that is the complete antithesis of the radical behaviourist approach to inquiry (e.g. Allport, 1935; Festinger, 1957; Fishbein & Ajzen, 1975; Meyers-Levy & Sternthal, 1992; Rosenberg & Hovland, 1960; Ryan & Bonfield, 1975; Sherif & Hovland, 1961). For the purposes of the present study, an alternative means of exploring the nature of the learning history and its influence upon multichannel consumer behaviour was therefore preferred.

Unfortunately, no single 'ideal' research method could be devised within the constraints of the study due to both time available and the comparatively small size of the Consumer Panel, the latter point being particularly salient as it precludes the use of complex multivariate techniques that may otherwise be appropriate means of exploring the complex range of variables that may or may not yield insight into the nature of an individual's learning history. Nevertheless, with some degree of interpretation applied, there *were* methods available of deriving albeit circumstantial evidence of the influence of the learning history during the channel selection process.

To begin with the apparent association of operant behaviour class with favoured purchase channel examined in respect of P_1, the data in **Table 4**, above, are at least broadly supportive of the notion of a learning history in operation if the statistical results are related to the radical behaviourist view of human 'habits' and their hypothesised origins in rule-governed behaviour.

As Baum (1994) observes, individuals are inclined to follow rules from a very early age. Children are told to "do as I say" and their compliance may be rewarded with chocolate or candy; non-compliance may be punished with sanctions, or worse. A rule is acquired as a result of its reinforcing consequences and it exerts influence upon behaviour in subsequent situations of an identical or similar nature. The child is instructed to be polite to teachers during his or her early days at school or to be brave and cooperative when (s)he visits the dentist, the degree of compliance with such parental instructions being rewarded or punished accordingly. Over time, the rule is strengthened and it serves to shape subsequent behavioural responses to such situations. The child develops a general tendency to be polite to teachers or to "be brave" and cooperative in the dentist's surgery. The response appears automatic. The behaviour has become a "habit". Of course, the traditional cognitivist view of rule-following of this nature is that the rule has become internalised – stored in memory, perhaps, and recalled in future situations – and serves to guide behaviour as though following a "rule book" through often automatic and unconscious information-processing activities. After all, in early teens, the parents are not present with the adolescent at the dentist's surgery to remind him/her to behave in a particular way; (s)he just does so through habit. The stimulus (parental instructions) and the response (behaving in a certain way) have become separated in time.

According to Baum, however, it *is* possible to interpret such rule-governed behavioural responses, or habits, without recourse to mentalism. In early childhood, the reinforcing consequences of behaving in a particular way – whether positive or negative – are immediately forthcoming due to the presence of the parent. In later childhood, the parent may well be absent from that situational context, but the environmental cues are still present (the teacher in the classroom, the dentist in his/her surgery) that serve as signals (i.e. discriminatory stimuli) of how the teenager should behave in that situation, variables within the current setting interacting with the individual's unique learning history to shape an appropriate behavioural response. What is termed a habit may, in behaviourist terms, therefore be reconceptualised simply as rule-governed behaviour. There is no need for constructs such as memory and information-processing, whether automatic and unconscious or otherwise; habitual behaviour is merely environmentally-contingent behaviour, appropriate discriminatory stimuli being identified by reference to prior learning outcomes (Malott, 1986; Poppen, 1989; Zettle & Hayes, 1982).

Seen in this light, it is thus possible to argue that, where an act of consumer behaviour becomes habitual, it may be inferred as being at least in part rule-governed; i.e. a function of the interaction between environmental variables and the individual's learning history (Foxall, 1997a). The consumer buys *Maxwell House* coffee several times, enjoys the taste on each occasion, and so habitually buys that brand of coffee in future, having acquired a rule ("*Maxwell House* coffee tastes good") that is triggered as the learning history is applied to the brands of coffee on display on the supermarket shelves during subsequent grocery shopping situations. Deviation from that rule may only occur where the environmental setting does not permit performance of the associated behavioural response; e.g. the supermarket is out-of-stock of *Maxwell House* coffee, so the consumer must examine other brands for likely discriminatory stimuli that may serve as signals for a satisfactory alternative buying response. Applying the same logic to the phenomenon of consumer purchase *channel* choice, there appears to reason to presuppose that this is an activity that is not equally rule-governed in its performance. That is, if there are habitual channel preferences for particular operant classes of consumer buying, as appears evident from the frequency data recorded in **Table 4**, above, then it may be inferred that this is rule-governed behaviour and evidence of a learning history in operation. Thus, if the operant interpretation of the data in Chapter 4 supports acceptance of P_1, then it may be deemed to also constitute indirect evidence of an individual learning history exerting influence upon consumer channel choice.

Of course, the key advantage of a longitudinal research design is that it permits data to be collected over time and examined for potential changes. The present study adopted just such a design and, as discussed previously, tracking data was accumulated via the monthly Shopping Diary. More specifically, for each of the 30 consumers who submitted a complete set of diaries during the course of the study, there were tracking metrics available recording the number of

apparel purchases made each month via the three purchase channels of interest to the researcher. Thus, investigation of this tracking data held a capacity to shed light upon changes in the consumer use of multiple retail channels over time.

Unfortunately, analysis of the tracking data was by no means as straightforward as it might at first appear. An obvious strategy to adopt might have been to engage in a quantitative content analysis of the monthly consumer descriptions of shopping episodes, as outlined in the previous section, and then seek to correlate that content analysis in some way with the cumulative data on monthly purchases made via available shopping channels. However, as highlighted earlier, the monthly diaries in fact required panel members to merely record a *single* shopping episode only, rather than *all* apparel shopping episodes, the rationale being to seek to elicit as detailed an account of a shopping trip each month as possible, not cursory details only of multiple shopping instances. Given this 'trade-off' between quantity and quality of discourse for the purposes of P_1, a more indirect way of relating the tracking data to P_2 was thus required.

The starting point for this stage in the analysis was the principal function of the learning history itself; namely, its status as a repository of the reinforcing outcomes of previous acts of consumer behaviour, be those outcomes positive or negative in form. In any given situation, the consumer draws upon her learning history in order to identify appropriate environmental cues that may signal the likely consequences of her actions, the actual consequences of those actions feeding back into the learning history and shaping responses to future situations of an identical or similar nature. On this basis, it could therefore be argued that an important indication that a learning history is indeed in operation would be to demonstrate that consumer behaviour is evolving over time and in light of experience (Foxall, 2003). Specifically, within the context of the present study, any systematic and iterative revision of channel usage patterns over time would, albeit circumstantially, be supportive of the operation of an ontogenic learning history, positive and/or negative outcomes of monthly shopping activities engaged in by Consumer Panel members shaping subsequent monthly shopping activities and their accompanying patterns of purchase channel usage. The task, therefore, was to analyse the monthly tracking data and establish that, rather than being static, patterns of channel usage in fact varied systematically over time.

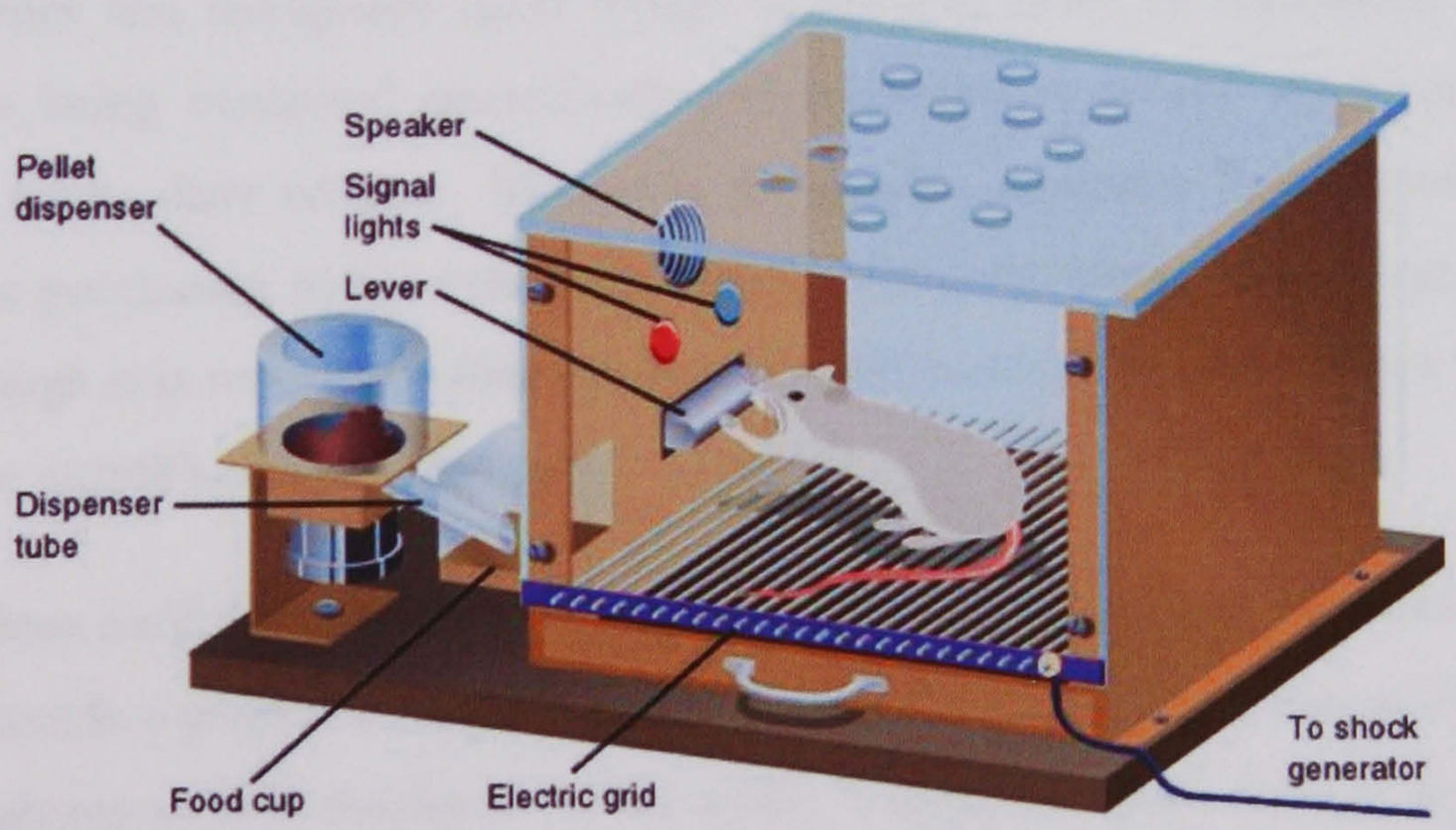
In order to explore this possibility, tracking data were extracted from the monthly shopping diaries of those 30 panel members who had submitted complete diary returns over the eighteen-month period in question. For each panel member, the data consisted of a record of the number of monthly store, catalogue and Internet apparel purchases made from any retailer for the duration of the empirical study.

Having extracted the tracking data for 30 consumers, the next challenge concerned the most appropriate way to present and analyse that data in order to facilitate the operant interpretation

of any behavioural trends identified. Given the relatively small number of panel members, traditional time series multivariate analyses were not considered appropriate (Breakwell et al., 2000) and, in any event, the inferential nature of such analyses would not have been consistent with the radical behaviourist approach to inquiry.

In place of such analyses, the present study returned to the behaviourist literature and adapted a technique originally developed by Skinner himself for use in animal learning experiments in the operant laboratory. As discussed in Chapter Two, learning theorists in the 1920s and 30s typically confined an animal (e.g. in a Puzzle Box) and measured the time taken to escape from that confinement as an index of the rate at which the animal had "learned" how to operate the escape mechanism provided, the said time decreasing with each exposure to the experimental situation as the animal's competences increased. Although concurring that this was, in principle at least, an appropriate metric to employ, Skinner nevertheless argued that this was an inefficient use of the psychologist's time and sought to automate the process instead via the development of the experimental operant chamber (Bolles, 1979). **Figure 7**, below, depicts a typical operant chamber in use in psychology laboratories today.

Figure 7: A Modern Operant Chamber



In the above, the animal is required to press the lever when a blue signal light illuminates, a successful operant being positively reinforced by immediate delivery of a food pellet. If the animal performs an operant when an alternative red light is on, however, or when either light is on and an audible tone is sounding, the said operant is negatively reinforced via the delivery of an

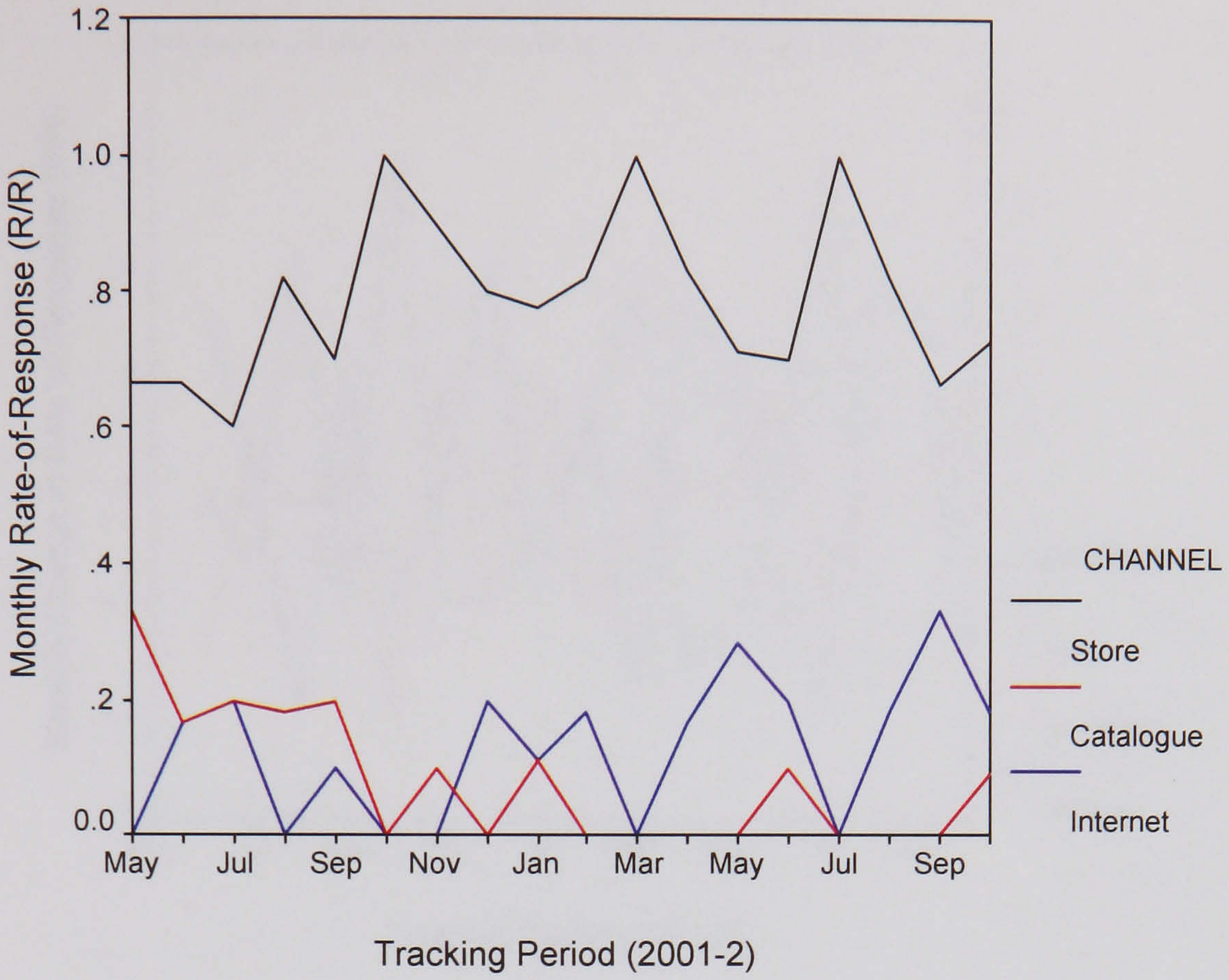
electrical shock through the floor of the chamber. Performance of an operant in the absence of any light or the tone has no reinforcing consequences whatsoever. Given the complexity of the above experimental situation, Skinner devised the *rate-of-response* (R/R) as an index of the animal's learning, a metric more complex than the original "escape time" measure employed by earlier behaviourists such as Thorndike (1898) and Watson (1913). A simple paper-and-pencil data recorder was attached to the operant chamber, logging on a graph the number of lever-presses made by the animal in a set time period. The rate-of-response was the number of "successful" (i.e. positively reinforced) lever-presses, expressed as a proportion of all lever-presses within that timeframe, which Skinner argued provided a direct measure of the animal's learning history over successive exposures to the operant chamber (Toates & Slack, 1990).

Based on the classic "Skinner Box" scenario, then, the present study elected to calculate an equivalent R/R per consumer per month via the tracking data extracted from the panel members' Shopping Diaries. Specifically, the number of purchases made via each channel in any monthly cycle would be divided by the total number of purchases made via all three channels in aggregation, the result of that calculation being three coefficients, each coefficient representing an individual consumer's R/R toward the store, catalogue and Internet purchase channels respectively.

Initially, calculation of this coefficient was impeded by the original design of the monthly diary. As can be seen in *Appendix I*, the number of purchases made via each channel was simply made via a basic categorical scale, thus preventing extraction of scale-level channel purchasing totals. This deficiency was recognised upon receipt of the first batch of completed diaries, however, respondents being contacted immediately and requested to record actual purchase numbers instead on future diary returns. Moreover, to ensure a complete data set would be available, Month One purchasing totals were estimated by taking the mean of each categorical response range, although it is recognised that this may in itself have led to some minor "skewing" of the data for that month's diary returns only.

Once the three coefficients had been calculated, then, they could then be plotted on a sequential graph to provide a graphical representation of the R/R by purchase channel for each consumer over the eighteen-month timeframe of the study. **Figure 8**, below, depicts the rate-of-response plot for a single panel member, Jill, based upon her three R/R coefficients for each month.

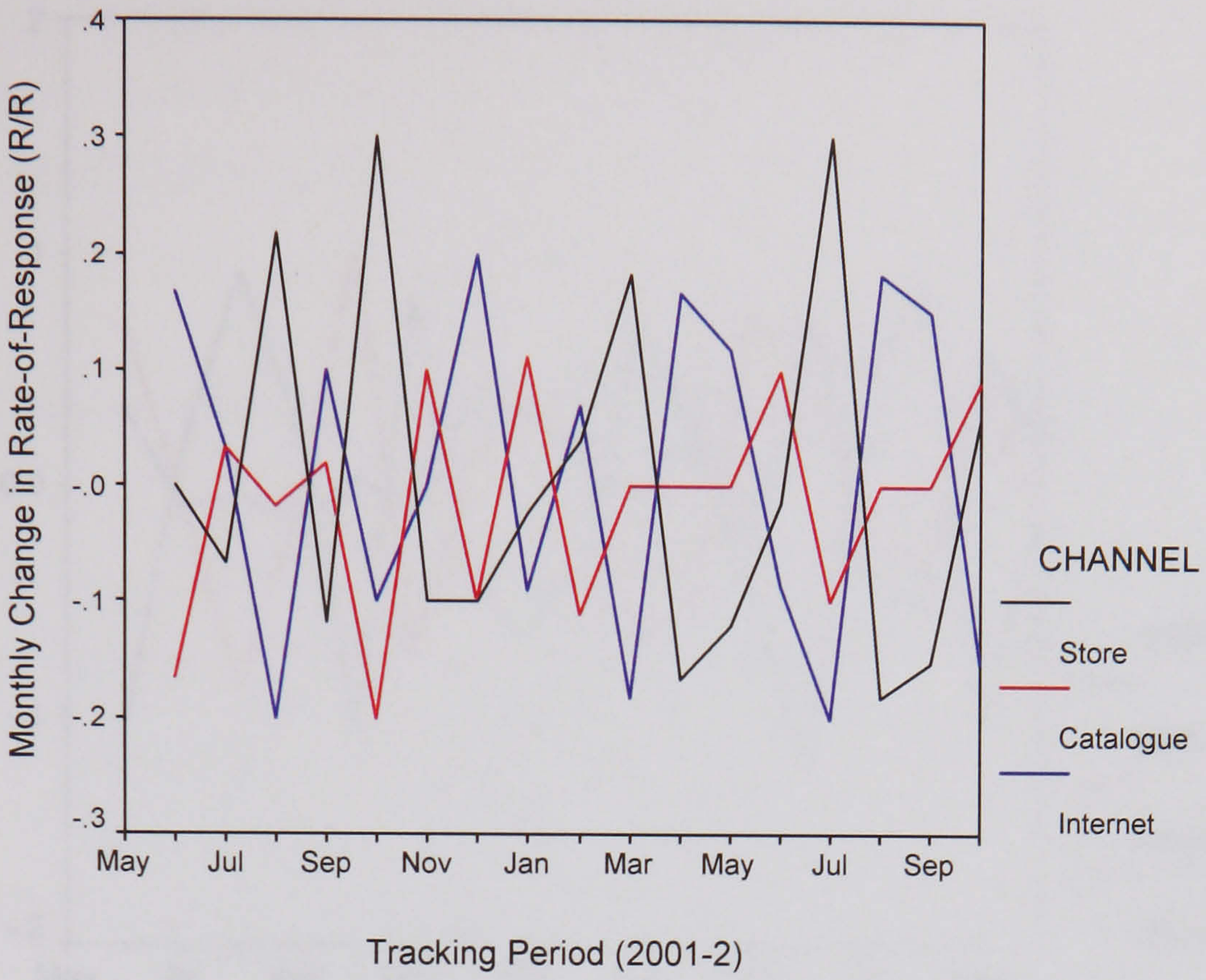
Figure 8: Rate-of-Response Plot for Panel Member "Jill"



Taken at face value, the above plot for "Jill" is potentially revealing for two main reasons. Firstly, it depicts a degree of interchange between catalogue and Internet channels throughout the tracking period, the Internet gradually superseding the catalogue as this particular consumer's preferred remote shopping channel. Secondly, and more typical throughout the Consumer Panel members, it also illustrates the overwhelming dominance of store purchasing as the primary model of apparel buying. Superficially interesting though such a plot is, however, the second point in particular highlights an important limitation in the practice of plotting raw R/Rs only; namely, that although the interchange between catalogue and Internet is detectable in the sample plot above, the dramatic gulf between store buying and remote buying may mask a similar degree of interchange between these two shopping formats.

To overcome this potential limiting factor, the data were therefore collapsed and a second plot generated based upon the monthly incremental *change* in purchasing rates per channel, rather than the purchase rates per se. **Figure 9** thus depicts the revised plot for panel member "Jill" based on changes in her R/R toward each channel over time. This revised plot format will subsequently be termed a consumer 'Behaviourgram' for the purposes of this thesis, an adaptation of a phrase originally coined by Watson (1922) to refer to the general practice of plotting changes in consumer buying rates in response to advertising stimuli.

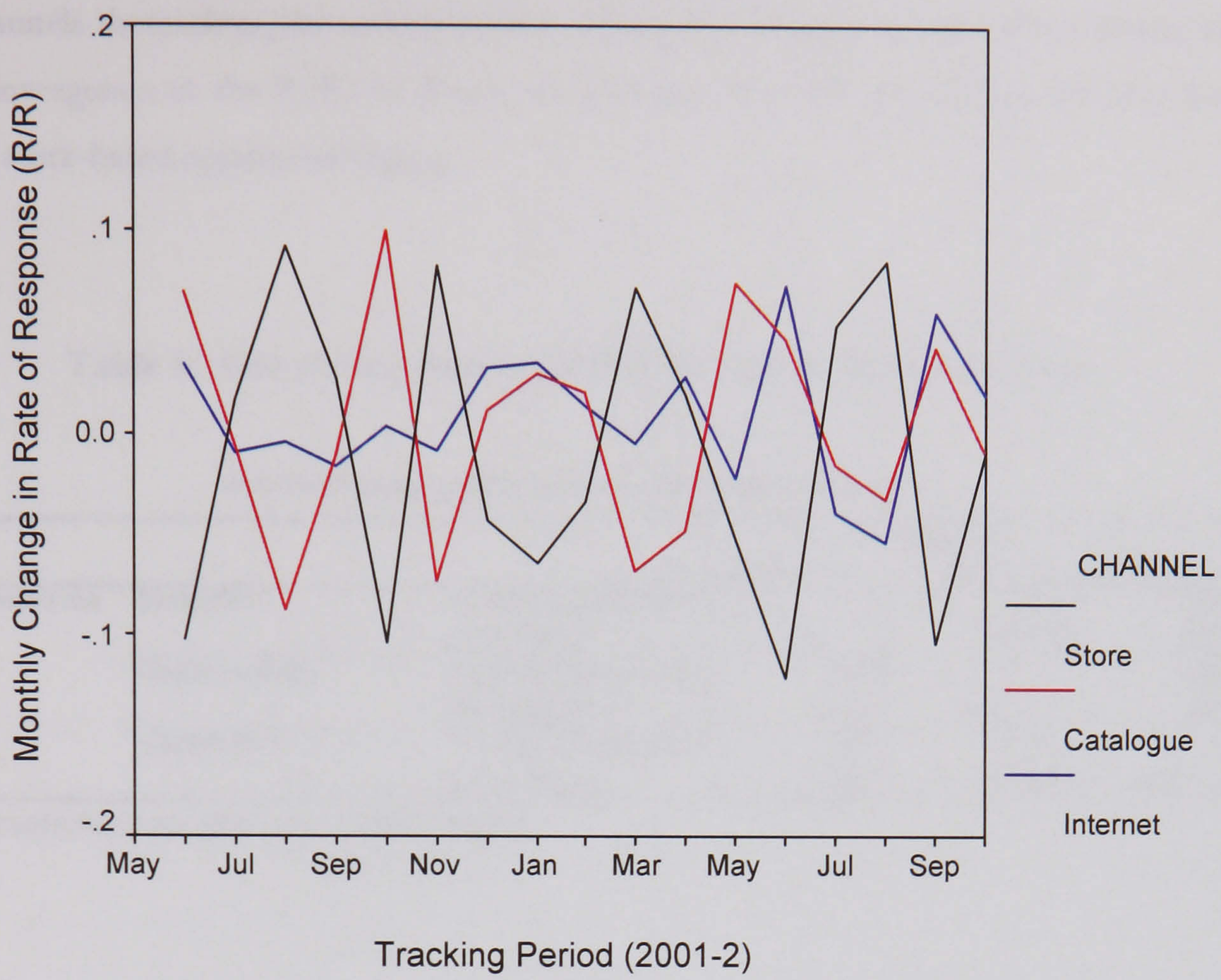
Figure 9: Behaviourgram for Panel Member "Jill"



Contrasting **Figures 9** and **10** immediately reveals the exploratory potential of the revised consumer Behaviourgram technique. Not only is the evolving interchange between catalogue and Internet purchasing by "Jill" retained and rendered more evident, the plot also reveals an interrelationship between store and remote buying in general; specifically, the plot indicates that remote buying is often at the expense of store purchasing (or vice-versa) throughout the tracking study, the latter portion revealing that the Internet is gradually replacing the catalogue as this particular consumer's primary alternative to traditional store-based retail formats. A trend such as this would not have been apparent in a plot of raw R/Rs only, suggesting that collapsing the data into the form of the Behaviourgram may be a very effective technique to employ in subsequent studies of multichannel consumer behaviour.

On the basis of the above success, the researcher therefore proceeded to aggregate the tracking data and produce a composite Behaviourgram for the Consumer Panel as a whole (**Figure 10**), derived from incremental changes in the monthly R/Rs of each individual panel member over the lifespan of the present study (*Appendix III*).

Figure 10: Aggregate Behaviourgram for Consumer Panel



The aggregated Behaviourgram above is significant because it offers the first clear indication of the changing channel usage patterns of Consumer Panel members during the lifespan of the present study. Initially, panel members display a marked tendency to rely primarily upon traditional store and catalogue purchase channels, a purchase made via one of these two channels often appearing to be almost at the expense of the other, with some degree of experimentation being evident in respect of the tertiary option of Internet shopping. By the end of the tracking period, however, not only has the Internet become more firmly established as a mode of purchasing, the R/R variations of these two remote channels have also begun to converge such that, taken in combination, they represent a powerful alternative to the traditional retail apparel outlet. This is a potentially important development in the multichannel buying patterns of consumers in this study and it will be explored in further detail in the subsequent interpretive analysis of the data in Chapter Four.

Multichannel consumer behaviour, then, clearly evolves over time and there is a high degree of interdependency between the consumer use of available modes of purchase, an interdependency mirrored in the matrix of inter-channel R/R correlations presented in **Table 6** below. The aggregated R/Rs of panel members yield strong correlations consistent with the data presented in the Behaviourgram above. There are substantial negative correlations evident between store-

based purchasing and purchasing conducted via both of the remote retail channels investigated. Moreover, the only correlations which are not statistically significant are those between the two remote channels themselves, the small positive correlations observed nevertheless confirming the gradual convergence in the R/Rs of these two purchase formats as a combined alternative to traditional store-based apparel shopping.

Table 6: Correlation Matrix of Channel and R/R Associations

Rate of Response (R/R) by Channel: Spearman Correlations

			Store (R/R)	Catalogue (R/R)	Internet (R/R)
Spearman's rho	Store (R/R)	Correlation Coefficient		-.730**	-.829**
		Sig. (1-tailed)	N/A	.000	.000
	Catalogue (R/R)	Correlation Coefficient	-.730**		.276
		Sig. (1-tailed)	.000	N/A	.134
	Internet (R/R)	Correlation Coefficient	-.829**	.276	
		Sig. (1-tailed)	.000	.134	N/A

**. Correlation is significant at the .01 level (1-tailed).

Given that any variability in R/R over time is conceptualised within the BPM framework as being a function of the reinforcing outcomes, be they positive or negative, of past operant responses and their consequences, the said variability may therefore be inferred as being at least in part a result of the iterative development and subsequent application of an ontogenic learning history that is serving to shape multichannel consumer behaviour over time.

There is, of course, an alternative possible explanation for the trends identified in both the Behaviourgram and Correlation Matrix above that does not depend upon the existence and action of the hypothesised individual learning history; namely, that the iterative variability in purchase channel usage is solely a function of changes within the saliency of particular environment-bound variables. For example, it is perfectly possible that the retailers whose channels panel members tend to favour vary, say, the price charged for apparel goods on a regular basis and that the panel members are responding purely to that price variance. In order to augment the circumstantial evidence depicted in the Behaviourgram and its associated correlations, it was therefore decided to investigate one further quantitative metric that may yield corroborating evidence for the operation of an individual learning history.

The variable selected for investigation was the construct of *involvement*, typically defined in terms of the degree of effort a consumer is willing to invest in pursuit of a successful purchase outcome, with particular emphasis upon the level of attention paid to available situational cues that may facilitate a satisfactory purchase decision (Dichter, 1964; Mitchell, 1979). Research

conducted in France by Laurent and Kapferer (1985), and replicated on a larger scale in the US by Rodgers and Schneider (1993), suggests that there are two primary determinants of the degree of involvement a consumer displays: the likely negative consequences of making an inappropriate purchase decision, together with its accompanying probability of occurring; and/or the degree of hedonic pleasure to be derived from a successful purchase decision and any social status/prestige associated with that hedonism. Moreover, a number of authors have argued that involvement levels evolve over time in light of past consumption experiences, positive and negative consequences of previous encounters with a product, brand or retailer serving to shape future encounters and the degree of effort expended during such encounters (e.g. Antil, 1984; Bloch, 1981; Lastovicka, 1978; Ohanian & Tashchian, 1992; Poiesz & DeBont, 1995).

Reinterpreted from the standpoint of radical behaviourism, the involvement construct is wholly consistent with the view of consumer behaviour depicted in the BPM framework for three specific reasons. Firstly, the notion that choice situations vary in the extent to which the individual attends to available environmental cues as aids to a successful purchase decision broadly concurs with the BPM proposition that consumers seek to identify discriminatory stimuli within the current retail setting that may signal the behavioural response option among those available that is most likely to maximise positive reinforcement and minimise aversive consequences. Secondly, and related to this, the proposed positive and negative determinants of level of involvement identified by Laurent and Kapferer directly correspond to the BPM constructs of positive and negative reinforcement, the emphasis upon hedonistic consumption and opportunities for status display in particular being consistent with the pleasure and accomplishment classes of operant behaviour predicted by the BPM on the basis of variability in hedonic and informational reinforcement levels. Finally, and perhaps most significantly of all, the hypothesised relationship between the degree of effort invested in an encounter with a product, brand or retailer and past experiences of that product/brand/retailer effectively endorses the BPM concept of an individual learning history in operation, serving to shape environmentally-contingent consumer behaviour in the current situation on the basis of the reinforcing consequences of previous encounters with identical or similar situations. Thus, taken in sum, any demonstrable correlation between the degree of involvement a Consumer Panel member displays in the use of an available purchase channel and her rate-of-response toward that channel would be powerful supportive evidence of the individual learning history proposed within the current BPM rendering.

In order to explore this potential association, a metric of involvement was required with which to correlate the consumer R/R toward particular purchase channels. Following a review of the extant literature on involvement measures, the *Revised Personal Involvement Inventory* (RPII) was selected for application in the present study, a ten-item metric that employs a semantic

differential scale to measure consumer evaluations of the involvement object on the basis of a series of standardised bipolar adjective pairings; e.g. *relevant-irrelevant*, *important-unimportant*, *fascinating-mundane*, etc. (Zaichkowsky, 1994). Typically, the semantic differential responses recorded by the consumer on the RPII are scored on a seven-point scale (1 to 7), the summed inventory yielding a score in the 10 to 70 range as an index of the level of involvement that the respondent will display in encounters with the product, brand or retailer being evaluated.

For the purposes of the present study, three completed RPIIs were required from each participant, one for each of the three purchase channels under investigation (*Appendix IV*). The three RPIIs were administered during the final three months of the study, the presentation order being randomised across panel members in order to reduce the likelihood of any response order biases (Alreck & Settle, 1995). Once completed, the RPIIs were scored and summed, the only deviation from the standard Zaichkowsky procedure being the decision to adopt a 0-6 score key rather than a 1-7 one, the result being an aggregated involvement score in the 0 (low involvement) to 60 (high involvement) range. This deviation was simply to render the data more index-like in form and thus simplify the process of correlation with other metrics.

The 90 RPII scores obtained for the 30 panel members are presented for reference in *Appendix V*). Statistical analysis again involved the use of the Spearman rank correlation coefficient, the observed correlations between aggregated R/R toward a channel and consumer RPII scores for that channel being summarised in **Tables 7** to **9** below.

Table 7: Store Shopping and Involvement

			Store R/R	Store RPII
Spearman's rho	Store R/R	Correlation Coefficient	1.000	.319*
		Sig. (1-tailed)	.	.043
		N	30	30
	Store RPII	Correlation Coefficient	.319*	1.000
		Sig. (1-tailed)	.043	.
		N	30	30

*. Correlation is significant at the .05 level (1-tailed).

Table 8: Catalogue Shopping and Involvement

			Catalogue R/R	Catalogue RPII
Spearman's rho	Catalogue R/R	Correlation Coefficient	1.000	.309*
		Sig. (1-tailed)	.	.048
		N	30	30
	Catalogue RPII	Correlation Coefficient	.309*	1.000
		Sig. (1-tailed)	.048	.
		N	30	30

*. Correlation is significant at the .05 level (1-tailed).

Table 9: Internet Shopping and Involvement

			Internet R/R	Internet RPII
Spearman's rho	Internet R/R	Correlation Coefficient	1.000	.315*
		Sig. (1-tailed)	.	.045
		N	30	30
	Internet RPII	Correlation Coefficient	.315*	1.000
		Sig. (1-tailed)	.045	.
		N	30	30

*. Correlation is significant at the .05 level (1-tailed).

With hindsight, it may have been advisable to collect RPII scores at intermittent points during the diary tracking period to test for any observable changes in involvement levels over time. As a consequence, it is not possible to determine whether the said scores were in themselves evolving over time in a manner consistent with the application of an individual learning history. All that is actual known, therefore, are the involvement levels evident at the study close. Nevertheless, despite this shortcoming, **Tables 7** to **9** clearly illustrate that significant correlations *were* observed between consumers' closing RPII evaluations of available purchase channels and their R/Rs toward those channels ($p<.05$). The correlation coefficients therefore support the view that general patterns of consumer channel usage are associated with individual differences in the levels of involvement elicited by particular channels. Moreover, if involvement toward a given purchase channel is indeed a direct function of past encounters with that channel, as the extant literature would suggest, then the RPII data lends support to the proposition that the consumer use of multiple retail channels is at least in part determined by the operation of an individual ontogenic learning history as implicit in both the evidence of habitual channel usage and in the R/R data depicted in the Behaviourgram – a proposition that will therefore be explored further in the subsequent evaluation of P_2 in Chapter Four of the thesis.

Behaviour Setting Variables as Discriminatory Stimuli

> *P_3: Different retail purchase channels are associated with the influence of different setting-derived discriminatory stimuli.*

P_2 focused upon the application of the individual learning history upon the current behaviour setting, the goal of that application being to identify those contextual factors (setting variables) that may serve as discriminatory stimuli signalling that behavioural response among the repertoire of responses available that is likely to lead to the maximisation of positive reinforcement and the minimisation of negative reinforcement/punishment. Related to this process of person-environment interaction, P_3 proposes that different forms of setting variable may be more or less effective as discriminatory stimuli depending upon the particular purchase channel employed. Put another way, different setting variables may serve as discriminatory stimuli for different purchase channels, thus playing a not insignificant role in the channel selection process.

Chapter Two explored the extant literature on situational influences upon consumer choice, proposing a composite taxonomy of potential behaviour setting variables on the basis of an aggregation of the most influential and relevant typologies of this nature available, and extending their scope of classification beyond the traditional store-shopping application by drawing upon the catalogue and Internet consumer behaviour literatures only. The resultant four-class taxonomy is reproduced in **Table 10** below.

Statistical exploration of P_3 was perhaps the most straightforward of all, given that it was essentially a variation on the approach adopted for investigation of P_1 earlier. The objective was to seek to relate particular channel-specific shopping episodes to the influence of behaviour setting variables in the four categories specified in **Table 10**, a task that could again be accomplished via a systematic application of the content analysis procedure outlined previously.

Specifically, a detailed coding rationale for setting variables was developed by drawing upon existing work in this area, particularly that of Belk (1975), Magnusson (1981) and Foxall (1997b). The coding rationale was, however, segmented into eight setting variable categories rather than four, thus accommodating instances where a particular variable or variable combination exerted either a positive or negative impact upon channel selection (*Appendix VI*). For example, if a consumer commented that she had been drawn into a retail store by loud and exciting music, and had then subsequently made an apparel purchase, this could be coded as a positive physical characteristic of that setting. By contrast, if the consumer had been prompted to leave the retail store because the music was too loud and her purchase had subsequently been made via a remote channel instead, then it could be said that the physical store had been avoided as a consequence of a negative physical setting-bound characteristic. The eight categories of setting variable employed in the coding rationale can therefore be summarised as shown below (**Table 11**).

Table 10: Behaviour Setting Variables

Category	Example Variables
Physical Characteristics	*Spatial location, institutional location, virtual location, store / catalogue / Website layout, visual depiction of merchandise, provision of product descriptors, actual product attributes, marketing "atmospherics", etc.*
Social Characteristics	*Presence or absence of other people, direct shopping companions, indirect shopping companions (strangers), sales staff, roles and role attributes of third-parties, attendees at a party plan event, service providers, telesales staff, 'chat-room' participants, etc.*
Temporal Characteristics	*Time of day / week / month, seasons, festivals, time constraints, opening hours of stores or telesales lines, event proximity (time since last meal, payday), etc.*
Intra-Individual Characteristics	*Fatigue, hunger, menstrual effects, symptoms of physical illness, symptoms of mental distress, mood states brought to a shopping episode, etc.*

Table 11: Coding of Behaviour Setting Variables

Category		Example Variable
Physical +	**P+**	*Attractive music*
Physical -	**P-**	*Music too loud*
Social +	**S+**	*Helpful telesales operator*
Social -	**S-**	*Rude telesales operator*
Temporal +	**T+**	*24-hour purchasing*
Temporal -	**T-**	*Delivery would take too long*
Intra-Individual +	**I+**	*Relaxed mood while exploring mall*
Intra-Individual -	**I-**	*Too tired to continue exploring mall*

Once the coding rationale had been developed, content analysis of the consumer diaries could proceed. The two postgraduate students who acted as coding analysts for P_1 were again employed and provided with appropriate training. Their specific task on this occasion was to analyse the 326 diaries previously identified as documenting at least one shopping episode conducted via store, catalogue or Internet, coding all references to behaviour setting variables in the ten categories defined, but only where those variables could clearly be identified as exerting influence upon the channel selection process. Thus, if a consumer merely commented upon the attractiveness of, say, an in-store display, this would not be counted as an instance of a positive physical characteristic of the setting unless the text also clearly led the analyst to conclude that the display itself had made a direct contribution to the act of purchase. Similarly, a consumer's remarks relating to the poor Web page layout of an online retailer would not qualify as a negative physical characteristic if there was no evidence that this had not contributed to the decision to adopt an alternative channel instead, such as a catalogue or retail store.

The result of this exercise was a total of some 2519 variables being rated by *Analyst 1* and 2485 by *Analyst B*. Upon close inspection, there was concordance on 1971 of these coding instances, yielding a coefficient of agreement of 0.78 (calculated by dividing the total number of agreed coding instances by the mean number of overall coding instances recorded by the two analysts). Although marginally below the >0.80 criterion proposed by Perreault & Leigh (1989), it was nevertheless decided to proceed with the statistical stage of the analysis on the grounds that: (a) given the high number of coding instances involved across the two analysts, a slightly lower level of agreement is perhaps only to be expected; and (b), in any event, the statistical analysis undertaken was but one stage in the evaluation of the research proposition under investigation and would not on its own lead to acceptance or rejection of P_3.

The result of the coding exercise was therefore a 10x3 contingency table, recording the number of agreed coding instances (1971) by both setting variable category and purchase channel employed (**Table 12**). The contingency table was then analysed by means of the Pearson Chi-Square 'goodness of fit' test, the results of which are recorded in **Table 13** below.

The results of the Chi-Square analysis were significant ($\chi_2 = 512.093$, $p<.001$, $df=14$), supporting the proposed association between a consumer's selection of purchase channel and those categories of behaviour setting variable serving as discriminatory stimuli to guide that channel selection decision in the pursuit of maximisation of positive reinforcement. Moreover, informal inspection of the variation between observed frequency counts and expected frequency counts in the cells of the contingency table suggests that some interesting trends are evident in the data – trends to be examined in more detail during the interpretive discussion of the data in Chapter Four of this thesis.

Table 12: Setting Variable Class by Purchase Channel

			Purchase Channel			Total
			Store	Catalogue	Internet	
Setting Variable Class	P+	Count	291	180	44	515
		Expected Count	281.1	133.8	100.1	515.0
	P-	Count	142	58	83	283
		Expected Count	154.5	73.5	55.0	283.0
	S+	Count	194	8	9	211
		Expected Count	115.2	54.8	41.0	211.0
	S-	Count	22	40	61	123
		Expected Count	67.1	32.0	23.9	123.0
	T+	Count	60	107	86	253
		Expected Count	138.1	65.7	49.2	253.0
	T-	Count	94	10	11	115
		Expected Count	62.8	29.9	22.3	115.0
	I+	Count	190	87	13	290
		Expected Count	158.3	75.3	56.4	290.0
	I-	Count	83	22	76	181
		Expected Count	98.8	47.0	35.2	181.0
Total		Count	1076	512	383	1971
		Expected Count	1076.0	512.0	383.0	1971.0

Table 13: Chi-Square Analysis for Setting Variable by Purchase Channel

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	512.083[a]	14	.000
Likelihood Ratio	548.668	14	.000
Linear-by-Linear Association	8.927	1	.003
N of Valid Cases	1971		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.35.

Multichannel Shopping Situations

P_4: Different retail purchase channels will be favoured in different shopping situations.

The BPM predicts that any act of consumer choice behaviour, including the act of purchase channel selection, will be a function of an interaction between characteristics of the individual consumer herself and characteristics of the environmental context within which she consumes; the person-environment transaction.

The aim of P_1 and P_2 was to investigate the person component in that transactional equation, seeking to relate consumer channel selection to both the form of shopping an individual is

engaging in and her previous experiences of that shopping form, together with their desirable and undesirable outcomes; i.e. the objective was to relate patterns of channel usage to both operant class of behaviour and the application of the individual's learning history during engagement in that class of behaviour. By contrast, P_3 sought to examine the environment component of the BPM transaction, with particular emphasis upon the nature of those characteristics of the current retail context (behaviour setting variables) that may effectively serve as signals (discriminatory stimuli) directing the consumer toward use of the available purchase channel most likely to deliver a favourable consumption outcome at a particular point in space and time. The preliminary statistical data accrued appears broadly supportive of the notion that channel choice is a function of a person-environment transaction, an observation which, if confirmed by the subsequent interpretive engagement with the data, would suggest that consumer purchase channel selection is indeed inherently situational in character.

The purpose of *P_4* was to seek further confirmation of the situational character of multichannel consumer behaviour and, in the process, to shed light upon the nature of those shopping situations most associated with particular patterns of purchase channel usage. More specifically, the primary objective was to consolidate and make sense of the data accrued in respect of P_1 to P_3 and to establish whether particular channel-related situational forms emerge from the apparent person-environment interaction – forms that are classifiable according to an appropriate BPM-derived taxonomy.

As discussed in Chapter Two, the BPM generates four distinct operant classes of behaviour on the basis of the particular matrix of high-low hedonic and informational reinforcing outcomes being pursued by the consumer; i.e. maintenance shopping, accumulation shopping, pleasure shopping, and accomplishment shopping. Moreover, these four operant classes can be further segmented by reference to the degree of behavioural scope available to the consumer in the current retail environment, as determined by a particular setting's relative position along an open-closed continuum of scope. The resultant eight categories of behaviour, termed contingency categories (CCs), are summarised again in **Figure 11** below.

Figure 11: Contingency Categories as a Proto-taxonomy

Operant Classes	CLOSED ——— *Setting Scope* ——— OPEN	
ACCOMPLISHMENT (high hedonic, high Informational)	CC2: Fulfilment (e.g. casino gambling)	CC1: Status Consumption (e.g. luxury car)
PLEASURE (high hedonic, low Informational)	CC4: Inescapable Entertainment	CC3: Popular Entertainment

Strictly speaking, the eight CCs in question are traditionally regarded as *behavioural outcomes of a situation* only, not as the situations per se. Thus, in an open setting that is high in hedonic reinforcement and low in informational reinforcement, an individual is anticipated as engaging in the consumption of popular entertainment forms (e.g. attending the theatre, a trip to the movies), drawing upon particular variables within that setting that may serve as discriminatory signalling the choice response option most likely to deliver a successful consumption outcome to the individual (e.g. consulting a theatre or movie review guide in order to inform choice of programme). However, as argued in Chapter Two, for most practical purposes the eight CCs *can* be regarded as situational forms and not just outcomes of such situational forms, given that each only comes into existence anyway when a particular learning history encounters a particular open or closed behaviour setting; an encounter which, in terms of the BPM explanation of the person-environment transaction, constitutes a situational event. Therefore, for the purposes of the present study, the eight CCs have been evaluated in terms of their viability as a taxonomy of retail shopping situations in which particular patterns of channel usage may be emerge as the behavioural outcomes.

The task of evaluating the final research proposition was actually much simpler than it may at first appear because, in fact, much of the analytical work had already been done in quantitatively evaluating the three previous research propositions. In particular, given that the eight CCs identified in **Figure 12** are merely the four operant classes of behaviour examined in **Table 4** earlier that have been dichotomised by the variable of setting scope, it was possible to begin the

current stage in the analysis by returning to the coding exercise conducted in reference to P_1 as a starting point.

Specifically, the process began by asking the two coding analysts to revisit the 295 diaries whose shopping episodes culminated in an actual act of purchase and, on the basis of descriptors provided of open and closed habitats (*Appendix VII*), they were instructed to locate each of the said shopping episodes along a six-point rating scale, thus:

OPEN 6 5 4 3 2 1 CLOSED

In utilising the above, each shopping episode would be evaluated by a coding analyst on the basis of the narrative content and descriptors provided, a score in the 1 to 6 range subsequently being assigned. A high score (4 to 6) represented an open behaviour setting and a low score (1 to 3) a closed setting. No intermediate response option was included in the scale and the two analysts were instructed to reach an open-closed decision for *all* of the diaries examined. Once all 295 diaries had been rated independently by the two coding analysts (*Appendix VIII*), the scope values assigned by the said analysts were correlated as an index of agreement (**Table 14**).

Table 14: Correlation for Analysts' Scope Ratings of 295 Diaries

			Analyst 1 Scope Ratings	Analyst 2 Scope Ratings
Spearman's rho	Analyst 1 Scope Ratings	Correlation Coefficient	1.000	.681**
		Sig. (1-tailed)	.	.000
		N	295	295
	Analyst 2 Scope Ratings	Correlation Coefficient	.681**	1.000
		Sig. (1-tailed)	.000	.
		N	295	295

**. Correlation is significant at the .01 level (1-tailed).

As illustrated above, the scope ratings of the 295 diaries by the two coding analysts yielded a significant correlation ($r_s = .681$, $p<.001$), suggesting a high degree of agreement between the two in their scope evaluations of the shopping episodes examined. In fact, closer inspection of the actual ratings awarded revealed that the analysts only disagreed over actual "open or closed" status on some 16 of the diaries, which were therefore eliminated at this point leaving 279 diaries for use in subsequent stages of analysis. Next, the agreed open-closed evaluations of the 279 diaries were combined with both the operant behaviour class data and purchase channel data calculated for P_1 to generate an 8x3 contingency table of frequency counts depicting contingency class (CC) by purchase channel utilised (**Table 15**).

Table 15: Contingency Class by Purchase Channel

			Purchase Channel			
			Store	Catalogue	Internet	Total
Contingency Class	CC1	Count	27	2	2	31
		Expected Count	19.3	5.3	6.3	31.0
	CC2	Count	18	6	5	29
		Expected Count	18.1	5.0	5.9	29.0
	CC3	Count	51	4	1	56
		Expected Count	34.9	9.6	11.4	56.0
	CC4	Count	24	6	6	36
		Expected Count	22.5	6.2	7.4	36.0
	CC5	Count	20	4	5	29
		Expected Count	18.1	5.0	5.9	29.0
	CC6	Count	9	6	13	28
		Expected Count	17.5	4.8	5.7	28.0
	CC7	Count	7	3	3	13
		Expected Count	8.1	2.2	2.7	13.0
	CC8	Count	18	17	22	57
		Expected Count	35.5	9.8	11.6	57.0
Total		Count	174	48	57	279
		Expected Count	174.0	48.0	57.0	279.0

Given that the earlier analysis of the operant behaviour class data had revealed significant differences in the purchase channel(s) favoured by consumers for maintenance, accumulation, pleasure and accomplishment shopping, it seemed reasonable to suppose that the eight CCs generated by their dichotomous sub-division on the basis of setting scope would similarly display significant differences in the patterns of channel usage associated with these eight CCs. This was confirmed by the Pearson Chi-Square analysis summarised in **Table 16** below ($\chi_2 = 66.825$, $p<.001$, $df=14$).

Table 16: Chi-Square Analysis for Contingency Class by Purchase Channel

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	66.825	14	.000
Likelihood Ratio	72.179	14	.000
Linear-by-Linear Association	43.103	1	.000
N of Valid Cases	279		

Taken at face value, the above data appear concurrent with previous data collected in respect of P_1 and P_2 and suggest that the eight CCs satisfy the *person*-bound requirements of a situational taxonomy, the indication being that the said CCs are associated with particular channel selection decisions as their behavioural outcomes, depending upon the particular operant class of consumer behaviour panel members are engaging in. For the eight CCs to truly constitute shopping situations, however, they must also satisfy the *environment*-bound requirement and display a parallel association with particular characteristics of the behaviour setting. In other words, the association between categories of behaviour setting variables and purchase channel usage indicated in the earlier P_3 data would be expected to translate into the eight CCs defined above, each CC and its channel selection outcome being shaped in part by those specific setting variables that panel members' learning histories are drawing upon as discriminatory stimuli during the actual channel selection process.

In order to explore this latter environmental dimension, the 279 diaries coded according to their apparent CCs were re-examined using the ten categories of behaviour setting variable outlined in **Table 11** above. Specifically, the methodology employed the codings already made earlier to explore the potential relationship between setting variables and channel selection outcomes posited in P_3. In this particular case, however, the objective was to relate the setting variables to specific CCs, rather than merely to channel usage patterns, the rationale being that any relationship between setting variables and CCs would be evidence supporting the notion that the CCs themselves were the product of a person-*environment* transaction.

On this basis, an 8x8 contingency table was constructed by classifying the previously identified instances of setting variables exerting influences upon the channel selection process in the 279 remaining diaries according to both contingency category and setting variable class (**Table 17**).

Table 17: Contingency Category by Setting Variable

			Setting Variable Category								Total
			P+	P-	S+	S-	T+	T-	I+	I-	
Contingency Category	CC1	Count	181	86	74	7	54	6	86	36	530
		Expected Count	142.7	77.6	55.5	29.4	64.8	28.9	81.0	50.1	530.0
	CC2	Count	106	44	20	9	30	16	67	28	320
		Expected Count	86.2	46.8	33.5	17.8	39.1	17.4	48.9	30.3	320.0
	CC3	Count	129	12	11	9	27	9	16	32	245
		Expected Count	66.0	35.9	25.7	13.6	30.0	13.3	37.4	23.2	245.0
	CC4	Count	31	24	7	7	24	5	16	17	131
		Expected Count	35.3	19.2	13.7	7.3	16.0	7.1	20.0	12.4	131.0
	CC5	Count	11	16	16	8	25	11	13	12	112
		Expected Count	30.2	16.4	11.7	6.2	13.7	6.1	17.1	10.6	112.0
	CC6	Count	14	21	18	10	16	10	13	20	122
		Expected Count	32.8	17.9	12.8	6.8	14.9	6.6	18.6	11.5	122.0
	CC7	Count	18	35	22	28	29	24	34	14	204
		Expected Count	54.9	29.9	21.4	11.3	25.0	11.1	31.2	19.3	204.0
	CC8	Count	14	36	28	26	24	21	41	18	208
		Expected Count	56.0	30.4	21.8	11.6	25.4	11.3	31.8	19.7	208.0
Total		Count	504	274	196	104	229	102	286	177	1872
		Expected Count	504.0	274.0	196.0	104.0	229.0	102.0	286.0	177.0	1872.0

Initial inspection of the distribution of data in **Table 17** appeared to suggest that, as anticipated, different CCs are associated with particular classes of setting variable, a suggestion confirmed by the subsequent Pearson Chi-Square analysis of that distribution depicted in **Table 18** below ($\chi_2 = 382.337$, $p<.001$, $df=49$).

Table 18: Chi-Square Analysis for Contingency Class by Setting Variable

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	382.337[a]	49	.000
Likelihood Ratio	404.484	49	.000
Linear-by-Linear Association	57.623	1	.000
N of Valid Cases	1872		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.10.

The statistical analysis in **Table 18** above is supportive of the final research proposition of this thesis. It suggests that the eight CCs and their associated channel selection patterns are in part shaped by setting variables, transformed into discriminatory stimuli by the application of the consumer's learning history during the course of a particular situational person-environment interaction. Put another way, the data support the notion that different retail purchase channels are favoured in different shopping situations, consumers seeking to draw upon their own unique individual learning histories of such situations in search of those environmental "clues" to the most satisfying shopping experience available to them at the specific point in time and space.

Multichannel Shopping – An Operant Process?

Preliminary results of the programme of empirical research documented in this chapter have sought to examine and measure the consumer use of multiple retail channels and the extent to which the BPM framework can offer a person-environment explanation of that channel usage. Specifically, the chapter has presented an account of the recruitment of a cohort of extant multichannel consumers and the longitudinal analysis of diary material documenting their individual channel usage patterns, an approach that is framed within the radical behaviourist empirical strategy of applied behaviour analysis.

The data presented in respect of P_1 began the process of inquiry by appearing to suggest that consumer choice decisions in any retail shopping situation are oriented toward maximisation of positive reinforcement and/or minimisation of negative reinforcement, the operant class of

behaviour resulting from available reinforcement outcomes (maintenance, accumulation, pleasure and accomplishment shopping) being associated with selection and use of particular retail purchase channels. Moreover, the apparent habitual nature of those channel selection patterns was broadly supportive of the existence and operation of an individual learning history, as posited in P_2, the consequences of previous behaviour-outcome associations shaping responses to subsequent situations of an identical or similar nature; an effect also supported by both the involvement data, whereby the amount of effort invested in a behaviour is regarded as a function of previous learning in respect of the likely outcomes of that behaviour, and by the Behaviourgram data that illustrated iterative changes in the rate or response toward a channel over time as a consequences of evolving experiences of that channel.

Whereas P_1 and P_2 dealt with the individual consumer, her pursuit of a successful purchase outcome and the role of her unique learning history in determining the purchase channel most likely to deliver that outcome, the contrasting P_3 data addressed the issue of the behaviour setting within which individual behaviour is presently located. In particular, the data implied that certain classes of environmental factor within the behaviour setting (physical, social, temporal and intra-individual variables) are especially salient in situations where particular purchase channels are favoured, an effect consistent with the proposed action of a learning history upon the current setting in an attempt to identify appropriate signals of the likely consequences of different available behavioural responses in the pursuit of a positively reinforcing consumption outcome. Thus, taken in sum, data accrued in respect of P_1 to P_3 have provided corroborative evidence in support of the operation of key BPM elements during the consumer channel selection process; i.e. the adoption of habitual operant classes of behaviour to facilitate maximisation of positive reinforcement, the ongoing development and application of an idiosyncratic learning history of previous behaviour-outcome associations, and the situational application of that learning history upon a behaviour setting in order to transform current setting variables into reliable discriminatory stimuli as cues to the reinforcing consequences of a particular channel selection and purchase decision.

In examining the validity of P_4, finally, the principal objective was to seek to consolidate the data accrued thus far in support of individual BPM elements by *integrating* those elements and seeking confirmatory data in support of their combined operation during purchase channel selection. Within the operant explanation of behaviour defined by the BPM framework as a whole, the hypothesised outcome of all of these individual elements acting in a combinatory manner is the individual consumer's observable performance of a particular category of environmentally-contingent behaviour that is either enabled or constrained according to the prevailing matrix of discriminatory stimuli currently available to that individual and by the extent to which they render the behaviour setting 'open' or 'closed' in respect of its scope for choice of behavioural response.

Thus, for the BPM to be considered a valid framework with which to model purchase channel usage, it was necessary to conclude the chapter by seeking to establish the extent to which selection of a particular purchase channel was associated with both: (a) a particular class of environmentally-contingent behaviour; *and* (b) a particular pattern of setting variables serving as discriminatory stimuli. In respect of both of these criteria, the statistical data presented in the concluding sections of this chapter are supportive of the BPM's capacity to generate an account of multichannel shopping as an operant process because statistically significant differences in both the contingency class (CC) of behaviour observable *and* the dominant class of setting variable exerting influence upon that behaviour have been identified according to the particular purchase channel adopted by a consumer. Taken in sum, the data accumulated in the present chapter therefore support the proposition that different retail purchase channels are favoured in different types of shopping situation, a phenomenon that is a consequence of a person-environment transaction as depicted within the BPM explanatory framework.

Within the radical behaviourist approach to inquiry, however, quantitative data in support of a particular research proposition do not *de facto* mean that the proposition itself constitutes a viable account of the behaviour under investigation. A researcher investigating the extent to which brand loyalty conforms to the Law of Effect, for instance, may predict and observe that there are significant differences in the rate of repeat purchasing by consumers depending upon whether the result of a purchase is consistently satisfactory or unsatisfactory in its outcome, but then closer inspection of the repeat-purchase data may in fact reveal an inconsistent pattern; e.g. unsatisfactory outcomes appearing to increase the likelihood of a repeat purchase, rather than decreasing it. Therefore, for radical behaviourist inquiry to result in acceptance of any research proposition, it is necessary to demonstrate that both the quantitative data themselves *and* the subsequent interpretation of emergent trends in that data are *both* consistent with the operant explanation of the behaviour being observed and measured – a requirement that shall form the primary focus of the following penultimate chapter of this thesis and its evaluation of the extent to which multichannel consumer behaviour can truly be regarded as an operant process.

4. CONSUMERS IN THEIR NATURAL HABITATS

"Zoologists wishing to study a particular species typically collect data from the habitat where the species is found in abundance. In adapting a similar perspective to the study of consumer behavior, researchers may profit from studying habitats where consumers throng."

P.H. Bloch, N.M. Ridgway & S.A. Dawson (1994: 24)

Introduction

The previous chapter documented the development and implementation of a programme of longitudinal research, conducted in association with the leading UK apparel retailer *Next*, in which the consumer use of multiple retail channels was subjected to an applied behaviour analysis. Specifically, the chapter detailed the empirical investigation of four key research propositions, preliminary analysis of the statistical data accumulated lending broad support to the notion that multichannel consumer behaviour can be interpreted as an operant process, the BPM appearing to represent a potentially viable explanatory framework with which to construct a radical behaviourist account of this still-emergent phenomenon. As noted in the concluding sections of that chapter, however, statistical data alone cannot *de facto* be accepted as evidence of an operant process being in operation. It is perfectly possible, for instance, that statistical analysis may reveal significant differences in repeat purchasing tendencies between shopping episodes in which the reinforcing outcomes were distinctly positive or negative, but that further engagement with the data revealed that it was the negatively reinforced purchase outcomes that increased the rate-of-response; an observation that would clearly be at odds with the core tenet of operant learning theory. Thus, for a behaviourist research proposition to be accepted, both the preferred quantitative measures obtained *and* their subsequent or simultaneous interpretation must be consistent with the operant account of the behaviour under observation.

With this qualification in mind, the present chapter re-engages with the statistical data accrued in Chapter Two and seeks to establish the viability or otherwise of the BPM interpretive technology in yielding a radical behaviourist explanation of the consumer use of multiple retail channels. Specifically, the chapter begins by examining the data acquired in respect of P_1 to P_3 and evaluates the extent to which the said data are consistent with the operant interpretation of

multichannel shopping. Given that P_1 to P_3 emphasise individual components of the explanatory framework only, however, the chapter then proceeds to explore the subsequent combinatory P_4 in some depth, the objective here being to appraise the BPM's explanatory power in its totality. Finally, in an attempt to establish the level of insight gleaned by applying a radical behaviourist conceptual and empirical strategy within the current thesis, the chapter concludes by considering the store, catalogue and Internet modes of shopping respectively in a more summative manner, the goal being to reach some initial conclusions as to the capacity of the BPM to shed light upon this as yet still emergent retail consumption phenomenon.

Channel Specificity and Operant Behaviour Classes

The first research proposition sought to establish the extent to which particular retail purchase channels may become associated with particular operant classes of consumer behaviour. Within the BPM conceptualisation, operant behaviour class can be regarded as being representative of the specific patterns of reinforcing outcome typically delivered by adoption of a consumer choice option, the precise forms of shopping engaged in during those behaviour classes being a function of the reinforcement form delivered and its saliency.

Typically, the four behaviour classes can be arrange in a hierarchy according to those positively reinforcing outcomes, from accomplishment shopping (high in both hedonic and informational reinforcement), through pleasure and accumulation shopping, down to the simple maintenance shopping (low in both positive reinforcement forms) located at the lowest level in that hierarchy.

The specific suggestion in this thesis is that particular retail channels become the preferred route to purchase during performance of particular classes of consumer behaviour, a process probably involving operant learning that is strengthened by classical conditioning. Just as a rat in an operant chamber learns that a particular lever-pressing action results in a positive reward, and that a specific light or tone serves as an effective signal of when to perform that lever-pressing action, so a retail apparel consumer learns that a particular route to purchase reliably and efficiently results in the delivery of the goods required under the circumstances desired, a process that may become conditioned further in an affective manner, especially in highly hedonic shopping situations. At the heart of P_1 was, therefore, the prediction that significant differences in channel usage patterns would be observed between different operant classes of consumer behaviour.

The distribution of the data in **Table 19** below confirms that there are significant differences in consumer channel usage tendencies depending upon the class of operant behaviour being

performed ($\chi_2 = 53.122$, $p<.001$, $df=6$). But, is the *nature* of these differences consistent with the operant explanation of that behaviour being proposed?

Table 19: Operant Behaviour Class by Purchase Channel

			Purchase Channel			
			Store	Catalogue	Internet	Total
Operant Class	Maintenance	Count	26	17	32	75
		Expected Count	46.0	11.4	17.5	75.0
		% within Operant Class	34.7%	22.7%	42.7%	100.0%
		% within Purchase Channel	14.4%	37.8%	46.4%	25.4%
		% of Total	8.8%	5.8%	10.8%	25.4%
	Accumulation	Count	29	10	22	61
		Expected Count	37.4	9.3	14.3	61.0
		% within Operant Class	47.5%	16.4%	36.1%	100.0%
		% within Purchase Channel	16.0%	22.2%	31.9%	20.7%
		% of Total	9.8%	3.4%	7.5%	20.7%
	Pleasure	Count	79	10	8	97
		Expected Count	59.5	14.8	22.7	97.0
		% within Operant Class	81.4%	10.3%	8.2%	100.0%
		% within Purchase Channel	43.6%	22.2%	11.6%	32.9%
		% of Total	26.8%	3.4%	2.7%	32.9%
	Accomplishment	Count	47	8	7	62
		Expected Count	38.0	9.5	14.5	62.0
		% within Operant Class	75.8%	12.9%	11.3%	100.0%
		% within Purchase Channel	26.0%	17.8%	10.1%	21.0%
		% of Total	15.9%	2.7%	2.4%	21.0%
Total		Count	181	45	69	295
		Expected Count	181.0	45.0	69.0	295.0
		% within Operant Class	61.4%	15.3%	23.4%	100.0%
		% within Purchase Channel	100.0%	100.0%	100.0%	100.0%
		% of Total	61.4%	15.3%	23.4%	100.0%

In order to seek to address this question, it is perhaps helpful to begin by considering each of the four operant classes of consumer behaviour depicted in the above table in reverse-order, beginning with the accomplishment class of shopping that is considered to yield the highest magnitude of positive reinforcement in both its hedonic and informational manifestations.

At the highest level in the operant behaviour class hierarchy, accomplishment shopping is characterised by a simultaneous delivery of both hedonic and informational reinforcement. Not only does the consumer derive pleasure from the act of purchase and consumption itself, she also experiences positive feedback on her performance in the role of consumer from third-party observers. Although this latter reinforcing outcome may occur post-purchase, as when a friend admires a new garment at a later date, it is also frequently related to the pursuit of symbolic meaning and the performance of overt status displays during the act of shopping itself. That is,

accomplishment shopping is strongly associated with conspicuous consumption, pleasure being derived from both consuming and from being seen to be consuming – a not uncommon characteristic of both adoption of product innovations in general, and of the "high-fashion" end of apparel shopping in particular (Brooks, 1981; Dodd, Clarke, Baron, & Houston, 2000; Gatignon & Robertson, 1991b; Hirschman & Holbrook, 1982; Midgley, 1983; Rogers, 1983; Rook, 1985a; Wong & Ahuvia, 1998).

Accomplishment shopping, then, is high in both hedonic reinforcement and in informational reinforcement, the latter typically being conspicuous in nature and delivered via the approving social behaviours of others. Given that remote retail formats such as the Internet and more traditional mail order catalogues are typically more asocial in character, it seems reasonable to presuppose that the physical retail store may be a more effective medium for the delivery of these parallel positive reinforcing outcomes and, as a consequence, may thus become the preferred channel via which accomplishment purchasing is mediated. The data in **Table 19** are, indeed, consistent with this anticipated channel usage outcome and lend preliminary interpretive support to the operant account of consumer behaviour, some 75.8% of all such accomplishment purchasing activities documented within the consumer diaries analysed being conducted in the more social environment of the retail store and mall.

Pleasure shopping retains the hedonic dominance in respect of its reinforcing outcomes, but is typically lower than accomplishment shopping in respect of its accompanying informational reinforcement properties. This is enjoyment of the act of consumption in its most direct, personal and hedonistic sense, goods, services and consumption experiences being sought that facilitate or perpetuate particular emotional responses. A number of studies of hedonistic consumption suggest a strong symbolic dimension may be evident. Particular brands that hold some meaning to the individual may be the primary focus of attention, for instance, particularly for classes of products that project some specific self-image; i.e. clothing, cosmetics, beauty products, designer goods, etc. Arousal-inducing experiences are a particular feature of this shopping form and there is evidence to suggest that individuals are especially prone to engaging in impulsive and/or compulsive acts of purchase in response to hedonistic cues. Overall, the literature suggests that this is shopping-as-entertainment, the behaviour itself and the environment within which it is enacted being as significant to the individual as the eventual purchase outcome (Arnould & Price, 1993; Holbrook & Hirschman, 1982; McCracken, 1986; Schouten, 1991; Sherry, 1998; Shields, 1992; Zepp, 1986).

Interpreted from a behaviourist perspective, pleasure shopping in its most hedonistic sense can be regarded as an operant behaviour class that is heavily dependent upon classical conditioning, exemplified by the capacity of particular brands or retail outlets to evoke strong emotional responses or for certain classes of goods or forms of retail entertainment to acquire strong

symbolic meaning. A strong environment within which to perform that operant behaviour class would therefore seem an essential prerequisite of pleasure shopping, an environment rich in available "signals" to evoke the necessary stimulus-response associations. This would again suggest that the traditional retail store may hold some advantage over less stimuli-rich remote shopping channels, a proposition that is also consistent with the aforementioned observed tendency to engage in impulsive and/or compulsive acts of purchase during pleasure shopping; quite simple, the retail store would be expected to be the dominant channel for such consumption acts because of its immediacy, remote channels such as the catalogue or Internet being disadvantaged by the time delay between performance of the act of purchase (ordering the goods) and enjoyment of the positively reinforcing outcomes of that purchase (delivery of the goods). As in the case of accomplishment shopping, the data in **Table 19** would also appear consistent with the operant interpretation of consumer channel usage, some 81.4% of pleasure shopping episodes recounted by consumers in the current panel being performed in the more stimulus-intense environment of the physical retail store.

Accumulation shopping, in many respects, is the mirror image of the pleasure-oriented operant class outlined above, being comparatively low in its potential to deliver hedonic reinforcement and more dependent upon higher levels of informational reinforcement as incentives to performance. This is the class of behaviour associated with "saving" and "collecting". On one level, this may manifest in quite literally the search for "bargains" and financial savings, the consumer seeking to conserve resources for performance of more hedonic consumption acts at a later date. At another level, it is also the class of behaviour in which cumulative incentives may prove attractive to the individual, retailer initiatives such as "loyalty card" reward points being accrued as both personalised metrics of individual skills in the act of shopping and to be used for more pleasure or accomplishment-related purposes at a later date. In any event, accomplishment shopping is unlikely to be completely devoid of all hedonically-reinforcing outcomes, many individuals deriving some degree of pleasure (i.e. positive affective response, in behaviourist terms) from aspects of the purchase experience such as the success achieved in acquiring a "bargain", the knowledge that "points" are being accrued for more hedonic applications later, and the general display of one's skills as an "expert" and "informed" consumer (Belk, Wallendorf, Sherry, & Holbrook, 1991; Hoyer, 1984; Hoyer & MacInnes, 1997; Jones & Suh, 2000; Lichtenstein, Netemeyer, & Burton, 1995).

With regard to channel preferences, it is difficult to predict that any individual retail channel may necessarily be the favoured route to purchase in accumulation shopping episodes. This is, by definition, an information-intense mode of shopping and all available channels clearly have different strengths and weaknesses in this respect. On the one hand, the retail store or mall is an ideal medium via which to explore current consumer trends and to engage in comparative

shopping through physical examination of the goods, and some "loyalty" schemes are in any case only available via the traditional store-based channel. Conversely, remote channels have particular information-yielding qualities too; catalogues can often be more detailed in their accompanying descriptions of products, for instance, whereas Internet search technologies are an effective tool to aid product/price comparisons. Overall, it would seem likely that this would be a channel aspecific behaviour class, with a stronger situational dimension, no individual purchase channel dominating accumulation shopping episodes. Again, this prediction appears supported by the available data above, the number of store-based accumulation shopping instances (47.5%) being very close to the proportion of remote shopping episodes in this consumer behaviour class (52.5%). The only surprising trend in the data is perhaps the almost 2:1 Internet-catalogue ratio for accumulation shopping, although this may well be an indication of the increasing effectiveness of online shopping media as sophisticated comparative tools in particular retail shopping situations – a possibility that the more situational dimension of the BPM associated with P_3 may subsequently shed light upon in the discussion below.

Finally, at the lowest level in the operant behaviour class hierarchy, simple maintenance shopping is relatively low in terms of positively reinforcing outcomes, whether hedonic or informational in character. This is the basis satisfaction of needs and, within an apparel context, is typified by the straightforward replenishment of staple items; i.e. underwear, work-wear, and other miscellaneous everyday items that are, in the main, regular repeat-purchase targets. This is thus the class of consumer behaviour that most corresponds to the lever-pressing actions performed by rats in the methodological behaviourist's operant laboratory, maintenance shopping being quite literally a low-level act of purchase in which individuals are simply replenishing regularly consumed items at varying product-specific intervals, with little or no positive affective responses being elicited by available stimuli and/or few opportunities for positive informational reinforcement – indeed, it may well be the case that maintenance shopping is more a negatively reinforced class of operant behaviour, performed in a repetitive manner and on a regular basis primarily to avoid the aversive consequences that may be experienced should an item *not* be replenished and the consumer be left devoid of some basic consumption requirement (Frenzen & Davis, 1990; Frisbie, 1980; Jain & Vilcassim, 1991).

For certain classes of goods and services, it may be the case that store-based shopping becomes the primary mode of maintenance purchasing simply because of product-specific characteristics; e.g. the freshness of food products whilst grocery shopping. In the case of apparel shopping, however, few such effects may be anticipated. At times, it may well be that the store is favoured simply because the purchase is an urgent one (e.g. an emergency replacement of hosiery, last-minute payment of a store card account, etc.) but, on the whole, it is more conceivable that the relatively few opportunities available for either hedonic pleasure or informational reinforcement

render maintenance shopping more amenable to the use of remote purchase channels such as the catalogue and Internet options. Quite simply, the consumer needs an item and must acquire/replace it, but she is likely to afford it a low priority due to the lack of pleasure and/or social approval available and therefore simply seek to procure that item via the "least-effort" option available. This conceptualisation of maintenance shopping also appears consistent with the data depicted in **Table 19**, two-thirds of all such purchase episodes documented in respondents' diaries being mediated by the remote channels examined. Moreover, the 2:1 Internet-catalogue purchasing ratio would suggest that electronic purchase channels are the most effective "ordering" media in low-involvement shopping of this form, browsing through a catalogue such as the *Next Directory* perhaps being associated with more relaxing and pleasurable remote purchasing contexts – again, an aspect to be examined further in the situational analysis which follows.

Taken in sum, P_1 predicted that different retail channels would become the favoured mode of purchase in the performance of particular classes of operant behaviour by virtue of their capacity to deliver the forms of reinforcement associated with those behaviour classes, and the empirical evidence available appears broadly supportive of that research proposition. Accomplishment shopping and pleasure shopping are both strongly associated with store-based purchasing, a medium that is capable via its social dimension of effectively delivering the informational reinforcement demanded by the former operant class, the more expansive stimulus-rich aspects of that retail environment also serving to facilitate the high hedonic reinforcement levels characteristic of both classes. Accumulation shopping, as may be anticipated, is more aspecific in respect of its channel associations, this being a class of consumer behaviour that is particularly information-intensive and each channel having particular strengths in that area depending upon the actual purchase context involved; a characteristic also suggestive of a strong situational effect in operation, to be explored further in due course. Finally, maintenance shopping is simply a class of behaviour characterised by the ongoing satisfaction of basic needs, often through low-level repeat-purchasing, typically realised in an apparel context via frequent use of remote shopping channels such as the Internet, such channels being adequate moderators of the low levels of hedonic and informational reinforcement anticipated by the consumer in instances where *efficient* acquisition of the item(s) required is afforded a higher priority than *pleasurable* acquisition of those items, store shopping only really becoming evident perhaps in the case of urgent maintenance purchases and/or where the item required is not available via other means. Thus, in sum, the evidence available is concurrent with the operant explanation of consumer behaviour, particular channels becoming associated with particular classes of consumer behaviour as a function of their efficient delivery of the required reinforcing outcomes of those behaviour classes. On the basis of both the statistical data and its amenability to radical behaviourist interpretation, then, P_1 can therefore be accepted.

The Evolutionary Nature of Channel Usage

The second research proposition directed attention toward the iterative nature of consumer behaviour and the specific learning history component of the BPM explanatory framework. Specifically, P_2 predicted that consumer channel usage patterns would change over time as a function of previous encounters with available purchase channels and their reinforcing outcomes. As discussed in Chapter Three, this was the most problematic aspect of the current behaviour analysis to investigate empirically, partly as a consequence of the reliance upon the content analysis of a single shopping episode per month only, thus precluding any direct correlation being made with the monthly tracking data. Nevertheless, a more indirect strategy was outlined in that chapter that would, hopefully, satisfy the general requirement of any demonstration of a learning history in operation; namely, that a process may be regarded as evolutionary if systematic changes in that process can be demonstrated over time (Dawkins, 1986).

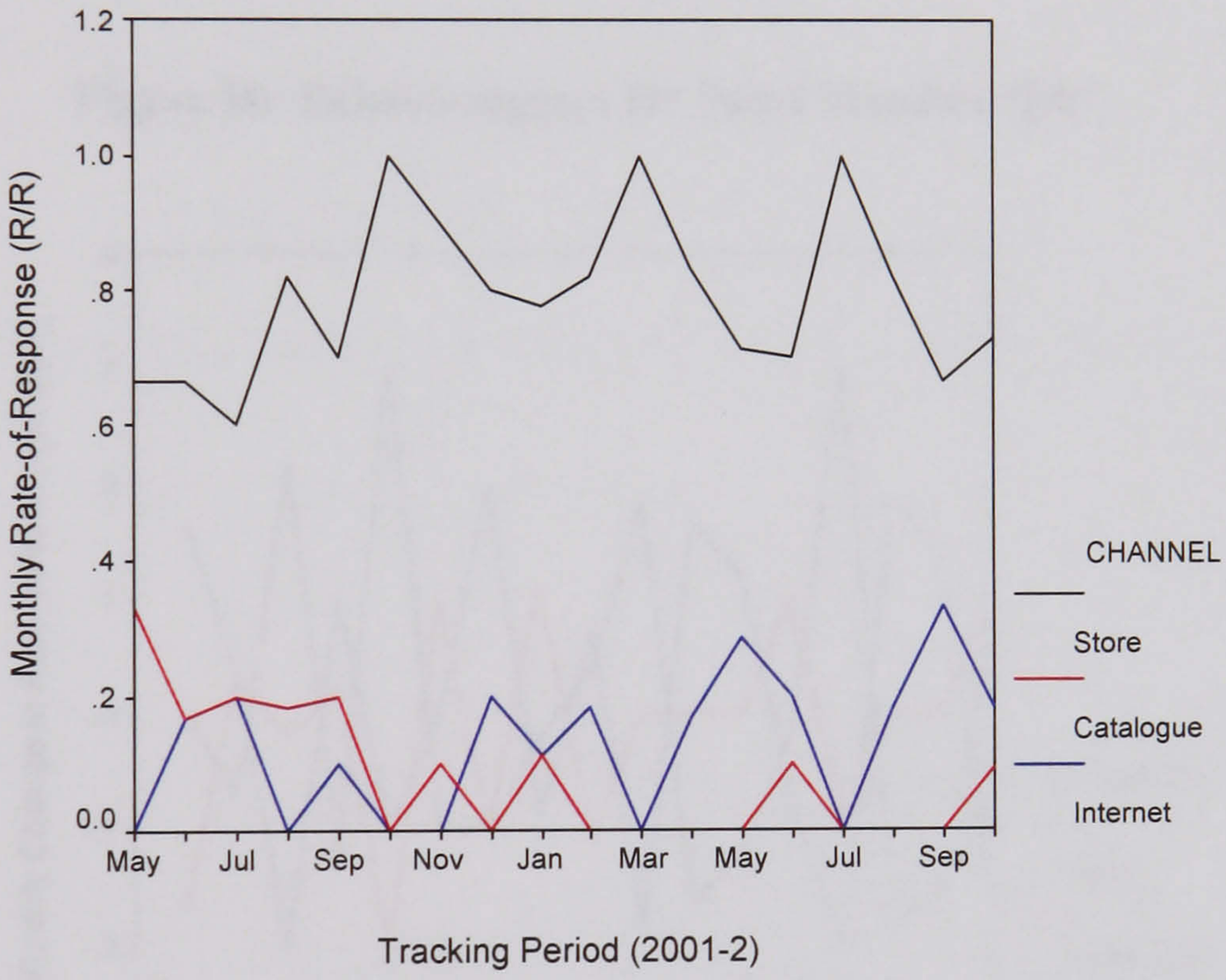
As a starting point for evaluation of the current research proposition, it was argued in the Chapter Three that the empirical evidence accumulated in respect of operant behaviour class performance and any associated channel usage patterns could, by implication, also be deemed to constitute corroborative evidence in support of an idiosyncratic learning history in operation. Where a particular purchase channel becomes the favoured option for a particular class of consumer behaviour, it can be interpreted as being a habitual response; an example of rule-governed behaviour within the context of the neo-Skinnerian paradigm. Given that the data presented in the previous section clearly demonstrate this form of habitual response in operation, it can therefore be inferred that the said response is an artefact of a learning history of past behaviour-response associations and their reinforcing consequences. A consumer learns that the Internet purchase channel is efficient in the delivery of staple items in a succession of maintenance repeat-buying situations, for instance, and so a behavioural rule is acquired that habitually directs the individual toward that electronic purchasing channel in subsequent maintenance shopping situations.

From a BPM perspective, however, evidence of a habitual behavioural response pattern *per se* does not constitute unequivocal evidence of a learning history in operation where metrics are applied longitudinally, as is the case in the present study. For a learning history to be deemed to be exerting effect over time, iterative changes must also be apparent as consumer behaviour is shaped by the particular matrix of prior reinforcing outcomes that is evolving during the ongoing encounters with purchase channels over the course of the tracking period. Moreover, the nature of those iterative changes must also be systematic and amenable to *operant* interpretation.

encounters with purchase channels over the course of the tracking period. Moreover, the nature of those iterative changes must also be systematic and amenable to *operant* interpretation.

As will be recalled, this evolutionary learning process was examined by means of the Behaviourgram technique, a repeated-measures plot of the rate-of-response toward each purchase channel over the eighteen-month tracking period. Chapter Three noted that a systematic process of revision could be identified in the Behaviourgram outputs, a process that may well be regarded as at least in part corroborative of the existence and operation of a BPM-derived individual consumer learning history. To illustrate this particular point, consider again the rate-of-response data for the single panel member "Jill", reproduced in **Figure 13** below.

Figure 13: Rate-of-Response Plot for Panel Member "Jill"



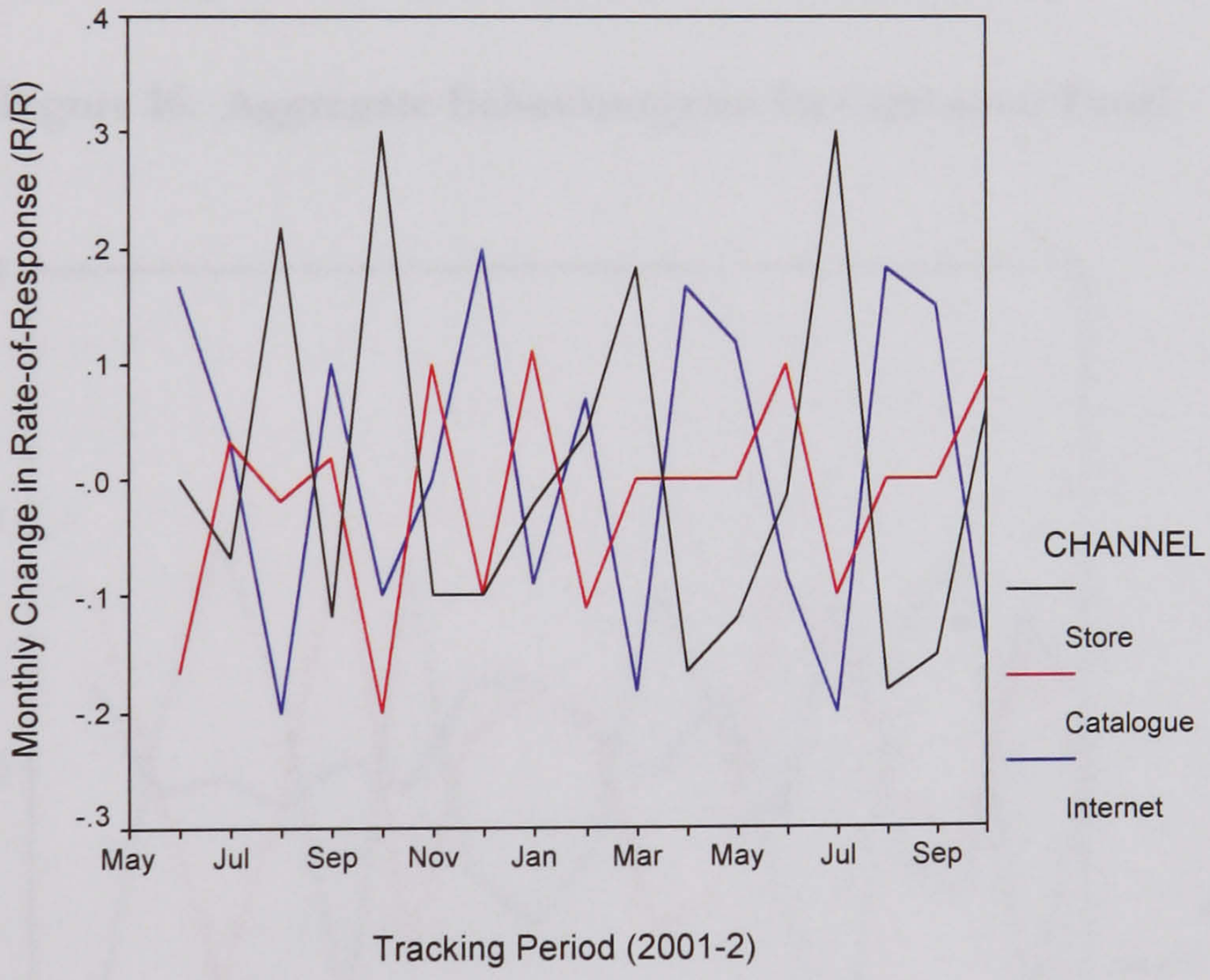
To begin with the "raw" data in **Figure 13**, this depicts the actual rate-or-response of "Jill" toward each purchase channel over the course of the tracking period, calculated as the ratio between purchases made via a channel to the total number of all purchases. As can be observed, the store-based option is significantly higher in its rate-of-response than other available shopping channels, a characteristic typical of the panel as a whole who displayed strong store preferences overall in their respective diary entries.

Consider the relationship between the two remote shopping channels, however. Initially, use of the Internet-based purchase option appears almost to be contrary to the catalogue option, "Jill" fluctuating her preferred remote purchasing method in an almost experimental way. Yet, by the close of the study, a clear developmental process can be claimed to be in evidence, the catalogue

and Internet options having stabilised and begun to converge with each other as they become accepted as appropriate and complementary shopping modes. Put another way, "Jill" eventually comes to accept the Internet as an almost equivalent home shopping option to the catalogue, *both* channels typically being patronised in those months where remote shopping activities are necessary. This strongly suggests a learning history in operation, initial experimentation ceding to the emergence of a more systematic and habitual pattern of channel usage as a function of the reinforcing outcomes of that initial experimentation.

Furthermore, the actual patterns of channel usage and their developmental nature become even more apparent when considering the more distended Behaviourgram data in **Figure 14**. This plot depicts the actual incremental and decremental changes in the rate-of-response toward each channel on a month-by-month basis.

Figure 14: Behaviourgram for Panel Member "Jill"



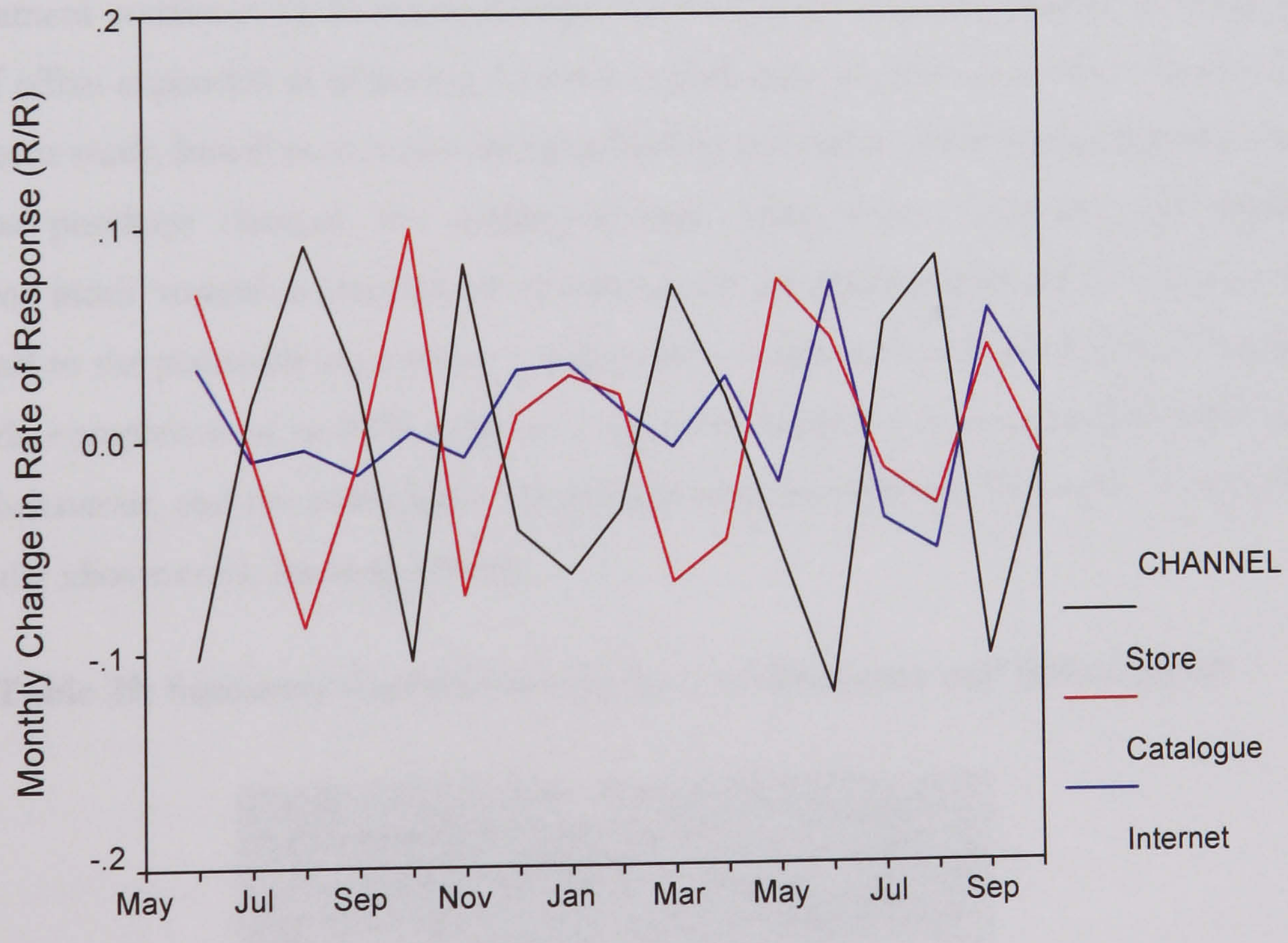
In the above, "Jill" can clearly be seen to alternate store-based purchasing with remote purchasing during the course of the tracking period. That is, each store-based purchase appears to be at the expense of a remote purchase, and vice-versa. During the initial months of tracking, the experimentation with remote channels is very much in evidence, "Jill" fluctuating her rate-of-response toward the Internet in particular in often a quite dramatic manner. In the central months (November to January), for instance, confidence in the use of this electronic purchase option has grown to such an extent that it appears to initially present itself as a direct competitor

to all other channels as her preferred mode of apparel shopping. By the closing months of the study, however, the channel usage patterns have become more stable and, as mentioned previously, "Jill" appears to have adopted the Internet option as a complementary channel to the catalogue-based option.

All of the above behavioural changes evident in respect of the channel usage patterns of "Jill" are consistent with the operant explanation posited in this thesis. "Jill" is displaying iterative changes in her rates-of-response toward available purchase channels over time in a manner concurrent with the hypothesised "shaping" of that behaviour in light of the reinforcing consequences of those behavioural responses. Moreover, by the close of the tracking period, "Jill" has begun to display evidence of habitual responding to the three available retail channels, her initial experimentation and its reinforcing consequences serving to inform the development of a general rule-governed habitual response.

This developmental pattern, presented here as indirect evidence of a learning history in operation, is by no means confined to the individual example of "Jill" and is very much apparent in the aggregated Behaviourgram data for the panel as a whole (**Figure 16**).

Figure 16: Aggregate Behaviourgram for Consumer Panel



A constant trend in the above data is the extent to which store-based and remote purchasing constitute almost competing channel options among panel members as a whole, any purchase "gained" by a remote channel generally being at the expense of a purchase "lost" by the

familiarise themselves with this still-emergent shopping medium. Gradually, however, confidence (i.e. satisfaction with the reinforcing outcomes) grows and both remote channels begin to "shadow" one another in terms of their viability as non-store purchase options, the two often being used in an almost combinatory manner in a regular and stable rate-of-response pattern. This developmental trend is consistent with the extant literature on adoption of innovation, initial low-level experimentation gradually ceding to more confident and stable usage patterns, often via an intermediate stage of accentuated purchasing; note, for instance, that Internet purchasing actually exceeds the more-established catalogue purchasing during the Christmas period, a trend consistent with the transient heightening in novelty-seeking tendencies often described in the innovation-diffusion literature. More importantly still, the systematic and evolving nature of the patterns schematically represented in the aggregated Behaviourgram are wholly consistent with the anticipated process of learning accompanying innovation diffusion and may thus be regarded as supportive of the operant interpretation of consumer channel usage developed herein. (Alba & Hutchinson, 1987; Boone, 1970; Dickerson & Gentry, 1984; Eastlick & Lotz, 1999; Foxall, 1988; Gatignon & Robertson, 1991b; Midgley, 1977; Midgley & Dowling, 1978; Nord & Peter, 1980a; Ostlund, 1974; Rogers, 1983; Taylor, 1977).

Finally and briefly, Chapter Three advocated adoption of one further metric as potential circumstantial evidence of an individual learning history in operation; namely, measurement of the involvement construct. In its classical sense, involvement is typically defined in terms of the amount of effort expended in obtaining access to a particular product or service. In the context of the present study, however, it is re-conceptualised by reference to the rate-of-response toward a particular purchase channel, the underlying logic being that consumers will display an involvement index toward a channel, as measured via the RPII paper-and-pencil test, that is proportional to the positively reinforcing consequences of past encounters with that channel. In other words, completion of an RPII measure is an act of behaviour in its own right, albeit a form of verbal behaviour, and the individual's behavioural response will thus be in part determined by her particular idiosyncratic learning history.

Table 20: Summary Correlations for Rate-of-Response and Involvement

Rate-of-Response by Retail Purchase Channel	Correlation with corresponding channel-specific RPII score
Store R/R	0.319
Catalogue R/R	0.309
Internet R/R	0.315

Summarised in **Table 20**, above, the correlational data presented in Chapter Three appears to confirm an association between the level of involvement a channel elicits from a consumer and

her previous experiences of that channel, the latter again measured by reference to the said channel's rate-of-response. Thus, when combined with both the aforementioned operant class channel specificities and the aggregated Behaviourgram data, this particular metric further supports acceptance of the second research proposition of the present thesis, together with its central assertion that patterns of channel usage are in part determined by the functioning of an individual's learning history within the current retail shopping situation, that hypothesised repository of previous behaviour-response outcomes serving to shape the consumer use of multiple retail channels over time in an iterative, adaptive and inherently evolutionary manner.

Channel Usage Behaviour and its Setting

The BPM framework asserts that, in any given consumer choice situation, the application of an individual learning history upon the current behaviour setting serves to transform available environmental variables into discriminatory stimuli that will signal the likely reinforcing consequences of available choice options by virtue of their effectiveness as such reinforcement signals in previous behaviour settings of an identical or similar nature. In view of the fact that particular retail channels become the preferred mode of purchase during performance of particular operant classes of behaviour, and that these operant classes are in themselves characterised by predictable patterns of reinforcing outcomes, the third component-level research proposition therefore suggested that particular forms of behaviour setting variable would come to serve as the preferred form of discriminatory stimulus directing the consumer toward selection of a particular purchase channel in a semi-habitual manner. That is, P_3 predicted that particular classes of behaviour setting variables would be associated with particular channel selection decisions.

As will be recalled from Chapter Three, investigation of the setting variables associated with each purchase channel took the form of a content analysis of 326 shopping episodes documented within the consumer diaries, resulting in a total of 1971 agreed codings between the two raters of setting variables mentioned by respondents within the context of a channel selection episode. Further, these variables were coded according to the four categories identified (physical, social, temporal and intra-individual variables), segmented into a total of eight sub-categories depending upon the extent to which they exerted either a positive or negative influence upon channel selection. The result of this exercise was thus an 8x3 contingency table, augmented in **Table 21** below, subsequent statistical analysis of which revealed significant differences in those categories of behaviour setting variables associated with particular channel selection outcomes (χ_2 = 512.083, $p<.001$, df=14).

Table 21: Setting Variable Class by Purchase Channel

			Purchase Channel			
			Store	Catalogue	Internet	Total
Setting Variable Class	P+	Count	291	180	44	515
		Expected Count	281.1	133.8	100.1	515.0
		% within Setting Variable Class	56.5%	35.0%	8.5%	100.0%
		% within Purchase Channel	27.0%	35.2%	11.5%	26.1%
		% of Total	14.8%	9.1%	2.2%	26.1%
	P-	Count	142	58	83	283
		Expected Count	154.5	73.5	55.0	283.0
		% within Setting Variable Class	50.2%	20.5%	29.3%	100.0%
		% within Purchase Channel	13.2%	11.3%	21.7%	14.4%
		% of Total	7.2%	2.9%	4.2%	14.4%
	S+	Count	194	8	9	211
		Expected Count	115.2	54.8	41.0	211.0
		% within Setting Variable Class	91.9%	3.8%	4.3%	100.0%
		% within Purchase Channel	18.0%	1.6%	2.3%	10.7%
		% of Total	9.8%	.4%	.5%	10.7%
	S-	Count	22	40	61	123
		Expected Count	67.1	32.0	23.9	123.0
		% within Setting Variable Class	17.9%	32.5%	49.6%	100.0%
		% within Purchase Channel	2.0%	7.8%	15.9%	6.2%
		% of Total	1.1%	2.0%	3.1%	6.2%
	T+	Count	60	107	86	253
		Expected Count	138.1	65.7	49.2	253.0
		% within Setting Variable Class	23.7%	42.3%	34.0%	100.0%
		% within Purchase Channel	5.6%	20.9%	22.5%	12.8%
		% of Total	3.0%	5.4%	4.4%	12.8%
	T-	Count	94	10	11	115
		Expected Count	62.8	29.9	22.3	115.0
		% within Setting Variable Class	81.7%	8.7%	9.6%	100.0%
		% within Purchase Channel	8.7%	2.0%	2.9%	5.8%
		% of Total	4.8%	.5%	.6%	5.8%
	I+	Count	190	87	13	290
		Expected Count	158.3	75.3	56.4	290.0
		% within Setting Variable Class	65.5%	30.0%	4.5%	100.0%
		% within Purchase Channel	17.7%	17.0%	3.4%	14.7%
		% of Total	9.6%	4.4%	.7%	14.7%
	I-	Count	83	22	76	181
		Expected Count	98.8	47.0	35.2	181.0
		% within Setting Variable Class	45.9%	12.2%	42.0%	100.0%
		% within Purchase Channel	7.7%	4.3%	19.8%	9.2%
		% of Total	4.2%	1.1%	3.9%	9.2%
Total		Count	1076	512	383	1971
		Expected Count	1076.0	512.0	383.0	1971.0
		% within Setting Variable Class	54.6%	26.0%	19.4%	100.0%
		% within Purchase Channel	100.0%	100.0%	100.0%	100.0%
		% of Total	54.6%	26.0%	19.4%	100.0%

The data depicted in **Table 21**, together with their corresponding Chi-square analysis, suggest that particular classes of setting variable are associated with particular channel selection outcomes. However, the task of determining whether the associations observed are consistent with the operant explanation of channel choice proposed in P_3 requires some degree of interpretation of that data, particular in respect of the relative contributions of each setting variable class to an outcome, as recorded in the "% within Purchase Channel" sections of the table. Put another way, for each of the three purchase channels, are the proportional influences of the setting variable types amenable to operant explanation?

To aid this process of interpretation, **Table 22** summarises the relative influence of each setting variable class upon a channel choice decision by means of a rank-ordering scheme, ranging from 1 (most important influence) to 8 (least important influence), the proportion of the channel selection outcome attributable to a particular setting variable class being recorded in parentheses.

Table 22: Setting Variables Rank Ordered by Channel

Setting Variable Ranking	Store Purchase	Catalogue Purchase	Internet Purchase
1	P+ (27.0%)	P+ (35.2%)	T+ (22.5%)
2	S+ (18.0%)	T+ (20.9%)	P- (21.7%)
3	I+ (17.7%)	I+ (17.0%)	I- (19.8%)
4	P- (13.2%)	P- (11.3%)	S- (15.9%)
5	T- (8.7%)	S- (7.8%)	P+ (11.5%)
6	I- (7.7%)	I- (4.3%)	I+ (3.4%)
7	T+ (5.6%)	T- (2.0%)	T- (2.9%)
8	S- (2.0%)	S+ (1.6%)	S+ (2.3%)

If the three purchase channels are considered individually, the degree of "fit" between the observed differences in setting variables associated with a channel and the operant explanation of those differences quickly becomes apparent.

To begin with the store-based option, decision to adopt this particular purchase channel appears to be substantially dependent upon aspects of the physical environment serving as discriminatory stimuli, over a quarter of all setting variables referred to in the consumer diaries falling into the physical-positive category. Such an observation is perhaps unsurprising given that the store itself is likely to be the most stimuli-rich of all retail behaviour settings and, indeed, a more qualitative engagement with the panel members' respective diary entries revealed a constant stream of

references to various aspects of the physical setting directing consumers toward the act of purchase, most notably in respect of those "atmospheric" characteristics of the proximal retail environment first outlined by Kotler (1973).

At their broadest level, the diaries suggest that physical characteristics of the retail environment can begin to shape the purchase response long before the consumer even enters the apparel store. A number of consumers, for instance, made reference to the tendency of retail malls to co-locate stores of a related nature or design, and aimed at a particular target market segment, along a single avenue within the mall, often with not dissimilar window displays serving as more visible and pertinent signposts (e.g. garment stores, accessory stores, shoe stores, etc.) and the effectiveness of this adjacency as a means of directing the individual toward those retail facilities likely to be of interest; a trend consistent with the principle of cumulative attraction that has been extensively investigated within the marketing, environmental psychology and retail geography literatures (see: Birkin et al., 2002; Edwards & Shackley, 1992; Grossbart, Mittelstaedt, Curtis, & Rogers, 1975; Ward, Bitner, & Barnes, 1992). Once within the retail store, other particularly salient cues to the likely satisfaction to be derived from a purchase option include the groupings of particular apparel products, their modes of display and accompanying stimuli (e.g. point-of-sale materials, display cases, etc.), and the careful management by the retailer of environmental characteristics such as aisle width, traffic flow, provision of changing facilities and general opportunities for browsing, together with more ambient factors such as lighting, colour schemes, décor, cleanliness, temperature and product association. Negative aspects of the physical setting rarely featured in consumer accounts of in-store buying, accounting for little over 13% of such variables recorded in the diaries, and were typically confined to references to instances where lack of parking, crowding and lack of opportunity to engage in a tactile examination of apparel goods had served as disincentives to the act of purchase, or where factors such as climate had directed the consumer to a store location that would not ordinarily have been the preferred setting (e.g. heavy rain causing a consumer to visit an undercover mall with an inferior retailer mix, rather than an open high street location where the retailer choices available would generally have been deemed superior). Overall, the physical setting variables referred to by consumers where generally concurrent with those environmental factors previously investigated by researchers and extensively documented elsewhere in the literature (e.g. Areni & Kim, 1994; Baker, Grewal, & Parasuraman, 1994; Bawa, Landwehr, & Krishna, 1989; Bellizzi & Hite, 1992; Chevalier, 1975; Eroglu & Machleit, 1990; McKinnon, J.P., & E.D., 1981; Patton, 1981). The striking feature in the present study, however, was the extent to which the diaries' content revealed the consumer reliance upon such variables specifically as discriminatory stimuli, with a resultant corresponding impact upon the rate-of-response.

A particularly notable feature of the diaries, however, was the degree of interaction evident between setting variable categories that appeared evident in the narrative content. Although the nature of the quantitative data precluded any multivariate analysis of this potential data characteristic, it was nevertheless possible to identify strong combinatory effects of variables apparent in the narrative discourse. As can be observed from **Table 22**, the variable categories ranked second and third in respect of store shopping were the positive social and positive intra-individual categories.

With regard to the former, social variables exerting a positive influence upon performance of the purchase response were again broadly in line with previous findings and included the presence of significant others, particularly family members and close friends, the opportunities afforded by a retail store for peer affiliation, and, to a lesser extent, interactions with retail sales personnel, all such variables frequently exerting effect by virtue of the reinforcing properties of third-party acts of verbal behaviour and the manifest content of such behaviour in respect of the communication of attitudes, opinions and confirmation of consumer product choice skills (Cohen & Golden, 1972; De Shields, Kara, & Kaynak, 1996; Dholakia, Pedersen, & Hikmet, 1995; Lindquist, 1975; Machleit, Kellaris, & Eroglu, 1994; Moschis, 1976; Stafford, 1966; Tatzel, 1982; Wakefield & Brodgett, 1994; Wilson & Sherrell, 1993). However, numerous diary entries highlighted the significance of the physical characteristics of the behaviour setting as a prerequisite of social interaction within retail settings, particularly the geographical dimension of that setting. There was a clear preference evident among panel members for inclusion of shopping activities as but one component in a prolonged and social leisure experience, several participants placing particular emphasis upon the location and proximity of stores/malls to non-retail facilities, such as bars, gyms, cinemas and restaurants, to emphasise the fact that the act of shopping was frequently secondary to social companionship and the attraction of the "girls' day in town".

Intra-individual setting variables were similarly prominent as discriminatory stimuli, serving to direct consumers toward a store-based purchase response. In particular, powerful mood-congruent effects were evident in consumer channel selection situations, the traditional store or mall holding particular appeal where a positive mood state was in evidence. In behaviourist terms, this mood congruency can be interpreted as being supportive of the hypothesised capacity of the retail environment to evoke emotional responses toward both products offered in the marketplace and accompanying setting-based stimuli (Mehrabian & Russell, 1974). The latter point is especially salient in respect of this study; many of the aforementioned physical setting variables shaping the consumer purchase response *only* appear capable of eliciting a purchase in instances where there is an accompanying emotional response to available cues, as in instances where the particular design and layout of a store is described as being "relaxing" or "luxurious", or where environmental factors such as background music, lighting and olfactory cues have a

positive impact upon time spent within the retail store examining the merchandise and/or upon consumer evaluations of product quality/suitability (North & Hargreaves, 1996; Richins, 1997; Smith & Curnow, 1966; Spangenberg, Crowley, & Henderson, 1996; Yalch & Spangenberg, 1990a). After Watson and Rayner (1920), it seems reasonable to presuppose that this capacity of setting-level variables to evoke an emotional response occurs via a process of classical conditioning, the said responses magnifying the saliency and effectiveness of other behaviour setting variables as powerful discriminatory stimuli (Foxall, 1997b; G.R. Foxall & G.E. Greenley, 1999; Russell & Mehrabian, 1978; M.Y. Soriano et al., 2002).

Finally, other setting-level variables appear to exert only a minor influence upon selection of the retail store as a purchase option and can generally be attributed to particular low-level effects. Temporal variables, for instance, appear relatively weak discriminatory stimuli within the context of store-based shopping, typically featuring only in respect of either the attraction of a physical store for urgent purchases or, conversely, as an inhibiting factor where hours of trading are not concurrent with consumer lifestyle demands. Similarly, physical and social variables only really emerge in the diaries as negative influences upon channel selection in situations where, say, an out-of-stock situation on a particular garment size, colour or style directs a consumer toward a remote purchase, or where an unsuccessful service encounter (e.g. a discourteous sales assistant) results in an aversion developing toward a channel, retailer or brand.

Taken in sum, the data available suggest that selection of the store-based channel as a purchase option is, on the whole, moderated primarily by the reinforcing properties of the physical and social characteristics of the retail environment serving as discriminatory stimuli, the effectiveness of such stimuli often acquiring an amplified saliency in respect of their discriminatory power by virtue of accompanying conditioned emotional responses.

In contrast to the stimuli-rich environment of the traditional retail store, remote shopping channels are generally regarded as "starved" of many of the atmospheric factors shaping consumer purchase behaviours and, in the main, considered more functional in character; an observation perhaps confirmed by the less-pronounced usage of the catalogue and Internet options among consumers and the accompanying tendency to document remote shopping episodes within the consumer diaries. Nevertheless, sufficient instances were recorded by participants to enable some initial conclusions to be drawn as to the more potent setting variables serving as discriminatory stimuli during remote shopping activities.

With reference to the catalogue-based retail channel, selection and use of this purchase option appeared to be positively influenced by setting-level variables in the physical, temporal and intra-individual categories. As may perhaps be anticipated with a medium such as the print catalogue, informational content played a significant role among panel members in directing them toward

performance of the purchase response, references to product descriptions and illustrations serving as effective priming cues. Product attributes were also important in this context, many consumers being directed toward a catalogue in search of a particular garment colour, size and/or level of availability.

Again, however, many of the physical behaviour setting characteristics associated with catalogue shopping referred to in the consumer diary entries where, upon closer inspection, closely related to the apparent capacity of such characteristics to elicit particular affective responses, further supporting the view that variables in other categories acquire enhanced saliency as discriminatory stimuli by virtue of classically-conditioned evoked emotional responses; a phenomenon clearly reflected in the relatively high number of positive intra-individual setting variables identified by the diary analysts. Undoubtedly, however, this is also a function of the form of mail-order catalogue favoured by panel members in this study, the most cited examples recorded in the diaries being those catalogues distributed by retailers who, like *Next* themselves, favour distinctive high-end formats, printed on high-quality paper and typically bound so as to resemble a "coffee table" book. Consumers made repeated references to the "upmarket", "stylish" and "posh" nature of their preferred catalogues and to the social status they perceived such catalogues as conveying. Moreover, offerings such as the *Next Directory* not only seem to be the favoured purchase channel during pre-existing positive mood states, they also appear endowed with a capacity to evoke such moods as witnessed by the not-infrequent references made to relaxing with a catalogue at, say, the end of a particularly difficult or stressful day; a practice suggesting that catalogue browsing may often be engaged in as a separate behaviour in its own right, consumers seeking a positive emotional response perhaps being at times inadvertently prompted to emit a purchase response upon encountering particular physical-setting stimuli. In respect of negative physical variables, however, a degree of trade-off is undoubtedly also engaged in, consumers being dissuade from performance of the purchase response as a consequence of the inability to examine goods prior to ordering and/or to enjoy the high levels of tactile stimulation often so characteristic of apparel purchases in general, and of fashion purchases in particular.

The significance of temporal variables as discriminatory stimuli should, perhaps, is the least surprising observation of all. An undoubted advantage of remote ordering in general is its level of convenience, both in respect of the capacity to order goods in situations where the store-based option and/or lifestyle characteristics impose negative constraints on time available in which the act of shopping may be engaged in or where actual acquisition and availability of the goods desired is required to be guaranteed by a consumer-specified date/time. Indeed, references to the ability to place a telephone order for catalogue-selected goods late into the evening and the

importance of a predictable delivery schedule almost exclusively account for the high incidence of temporal-positive observations recorded in the data table.

Following on from the above, the convenience factor also appears responsible for the dominance of temporal setting-level variables in directing consumers toward the Internet-based retail purchase channel. As **Table 22** illustrates, this is in fact the *only* form of setting variable to feature in the upper half of the rank ordering, positions 2 to 4 being occupied by variables in the physical, intra-individual and social categories respectively, each apparently exerting a negative influence upon channel choice. On the one hand, this can be regarded as simply the "temporal dividend" associated with remote ordering in general in evidence again, in this instance amplified by the capacity of the Internet to facilitate the procurement of goods twenty-four-hours per day, thus freeing the consumer from the constraints often imposed by retailers upon ordering where such orders must be placed via limited-availability telephone-based shopping services. At the same time, however, it would be a mistake to over-simplify the data depicted in the above table for the interaction of this variable with the three highlighted negative categories becomes more apparent where the concept of setting variables as discriminatory stimuli is applied to an interpretive engagement with the diaries.

Engagement with the narrative content of the consumer diaries reveals the true potency of negative setting-level variables in dissuading consumers from online purchasing. With regard to physical setting characteristics, for instance, consumers in this study were often deeply critical of the inferior illustrations of apparel products evident in retail websites, the slow "load times" of such illustrations, the lack of opportunity available for physical inspection of the goods, the low instance of task-relevant cues available relative to other retail formats, the absence of traditional "atmospheric" variables learned as reliable cues in non-virtual environments, and the not infrequent complications experienced as a result of the functionality, layout and accessibility of the intervening technologies themselves and their physical locations Similarly, with regard to the asocial nature of Internet shopping, participants disliked the absence of companions during the garment selection process, found the inability to interact with sales staff an inhibitant to information acquisition and product evaluation, and frequently remarked upon the lack of presence of other consumers as a barrier to social comparison, a not insignificant limitation of the medium in respect of fashion purchasing in particular. Most importantly of all, perhaps, where such negative physical and/or social characteristics of electronic remote purchasing become evident, they may serve to evoke negative emotional responses to the medium also, the frustrations experienced by online shoppers being wholly consistent with the current data set and well-documented within the extant literature (Athiyaman, 2002; Chaffey, Mayer, Johnston, & Ellis-Chadwick, 2000; Donthu & Garcia, 1999; Goldsmith & Flynn, 2004; Jayawardhena et al., 2003; Oinas, 2001; Perottii et al., 2003). Within the context of the present study, it is thus not

difficult to reconcile such combinatory effects with the operant explanation of consumer channel choice, the setting variables identifiable within the diaries as exerting an negative impact upon online purchasing effectively serving a *positive* discriminatory stimuli in respect of their capacity to direct consumers toward alternative modes of purchase and, in exceptional cases, to result in the emergence of a degree of aversion to the Internet-based option where difficulties experienced in utilising that medium repeatedly evoke negative effective responses. At the same time, however, the fact that Internet purchasing continues despite such negative reinforcement perhaps also bears testament to the capacity of particular categories of setting-level variables, under the right circumstances and subject to an individual's particular learning history, to override alternate negative stimuli, the high incidence of positive temporal variables evident suggesting that – at least in virtual shopping environments – this may be an especially salient form of discriminatory stimuli which, if manifest, may result in a degree of "trade-off" becoming apparent such that performance of the purchase response via electronic means continues and persists.

Take in sum, whether analysed on a quantitative or qualitative basis, the evidence accumulated in the consumer diaries supports acceptance of the third research proposition of this thesis. Particular categories of behaviour setting variable are indeed associated with consumer adoption of particular retail channels and, moreover, the effect of those variables appears amenable to operant interpretation, the qualitative engagement with the diaries in particular suggesting that situational influences of this nature occur as a consequence of the said variables being endowed with a capacity to serve as effective and reliable discriminatory stimuli, directing the individual toward utilisation of that available retail channel that may most reliably and efficiently deliver maximisation of positive reinforcement within the current retail shopping situation.

Channel Selection Outcomes as Contingency Categories

As noted earlier, the first three research propositions were designed to test individual components in the BPM explanatory framework and their applicability to aspects of the consumer channel selection decision, together with the extent to which that said applicability may or may not be concurrent with the operant explanation of consumer behaviour.

On all three counts, both the statistical data and its interpretation indeed appear consistent with a radical behaviourist account of multichannel shopping: the evidence in respect of P_1 suggests that particular purchase channels facilitate the performance of particular operant classes of behaviour as a consequence of their relative efficiencies in delivering specific patterns of reinforcing outcome; with regard to P_2, there is indirect evidence available in multiple forms to support the existence and operation of an individual learning history, both in terms of the gradual

development of habitual patterns of channel usage and the iterative revision of those channel usage patterns over time; and for P_3, finally, there are clearly-apparent differences in the key classes of behaviour setting variable serving as discriminatory stimuli in each channel usage episode, effectively signalling the likely capacity of any available purchase channel to maximise positive reinforcement and/or minimise negative reinforcement in the current retail shopping situation. In all three cases, therefore, acceptance of the research propositions can be deemed appropriate, the evidence presented to date satisfying standard radical behaviourist criteria in respect of both the trends inherent in the statistical data available and the viability of the operant explanation of behaviour in accounting for the trends inherent in that statistical data.

The purpose of P_4, however, was to consolidate those individual BPM elements and to evaluate their combinatory action as a systematic framework with which to understand the consumer use of multiple retail channels from a radical behaviourist perspective. Specifically, it will be recalled from both Chapters Two and Three that the various potential anticipated outcomes of this interaction of BPM elements may be classified according to eight possible contingency categories, each a function of: (a) the operant class of behaviour being engaged in; (b) the application of the learning history upon the current behaviour setting, together with its efficiency in identifying salient variables within that behaviour setting that may serve as reliable discriminatory stimuli signalling the reinforcing consequences of available choice options; and (c) the degree of choice *actually* available to the consumer in the current consumption situation, as determined by the location of the present behaviour setting along an "open-closed" choice-latitude dimension. In other words, the outcome of the BPM's combined operation is hypothesised as being a situationally-specific act of consumer behaviour and it is the central contention of this thesis that this behavioural act's position within the eight-category CC taxonomy will characterised by an association with a dominant preferred retail purchase channel as a consequence of the said channel's efficiency in maximising the likelihood of delivery of positive reinforcement.

Reproduced in summative form in **Tables 23** below, data were presented in the previous chapter demonstrating that significant differences exist in the extent to which consumers in the current cohort tended to favour a particular purchase channel during engagement in a particular situation-specific act of consumption, or CC ($\chi_2 = 66.825$, $p<.001$, $df=14$).

Table 23: Contingency Class by Purchase Channel (Summative)

% within Contingency Class

		Purchase Channel			
		Store	Catalogue	Internet	Total
Contingency Class	CC1	87.1%	6.5%	6.5%	100.0%
	CC2	62.1%	20.7%	17.2%	100.0%
	CC3	91.1%	7.1%	1.8%	100.0%
	CC4	66.7%	16.7%	16.7%	100.0%
	CC5	69.0%	13.8%	17.2%	100.0%
	CC6	32.1%	21.4%	46.4%	100.0%
	CC7	53.8%	23.1%	23.1%	100.0%
	CC8	31.6%	29.8%	38.6%	100.0%
Total		62.4%	17.2%	20.4%	100.0%

Previous studies of the BPM-derived contingency categories have typically taken the form of attempts to allocate particular consumption acts to specific CCs on the basis of the reinforcement patterns thought to be associated with the said acts and the relative open-closed status of the prevailing situations, and merely inferring that particular setting variables must be in part involved in performance of the CCs by implication only. In the present study, however, a more overt attempt was made to extend this underlying methodology by seeking to establish whether particular classes of setting variable were associated with particular CCs and their accompanying channel preference patterns, thus rendering more explicit the nature of the likely discriminatory stimuli drawn upon by the consumer during performance of a specific consumption act via her favoured mode of purchase. Again, reproduced in summative form below, the data in **Table 24** demonstrate that there are, as anticipated, significant differences in the forms of setting variable serving as discriminatory stimuli according to the particular CC the consumer is engaging in at the time ($\chi_2 = 382.337$, $p<.001$, $df=49$).

Table 24: Contingency Category by Setting Variable (Summative)

% within Contingency Category

	Setting Variable Category								
	P+	P-	S+	S-	T+	T-	I+	I-	Total
CC1	34%	16%	14%	1%	10%	1%	16%	7%	100%
CC2	33%	14%	6%	3%	9%	5%	21%	9%	100%
CC3	53%	5%	4%	4%	11%	4%	7%	13%	100%
CC4	24%	18%	5%	5%	18%	4%	12%	13%	100%
CC5	10%	14%	14%	7%	22%	10%	12%	11%	100%
CC6	11%	17%	15%	8%	13%	8%	11%	16%	100%
CC7	9%	17%	11%	14%	14%	12%	17%	7%	100%
CC8	7%	17%	13%	13%	12%	10%	20%	9%	100%

To reiterate, **Table 23** presents quantitative data supporting the proposition that particular contingency categories (i.e. situation-specific acts of consumer behaviour) are associated with adoption of particular retail purchase channels. On this basis, given that the individual

constituents of these CCs (i.e. operant behaviour class, operation of a learning history, open-closed choice latitude) have previously been established in this chapter as being amenable to operant explanation in respect of their channel associations, it seems reasonable to proceed to allocate the channel preference patterns depicted in the table to their corresponding CCs, particularly as **Table 24** extends previous research in this area by confirming the anticipated effect of classes of behaviour setting variables serving as discriminatory stimuli during these CCs. **Figure 16**, below, therefore reproduces the eight CCs discussed in the previous chapters, annotated to depict the dominant retail purchase channel associated with each individual CC.

Figure 16: Contingency Categories and their associated Purchase Channels

Operant Classes	CLOSED ——— *Setting Scope* ——— OPEN	
ACCOMPLISHMENT (high hedonic, high Informational)	**STORE** CC2: Fulfilment (e.g. casino gambling)	**STORE** CC1: Status Consumption (e.g. luxury car)
PLEASURE (high hedonic, low Informational)	**STORE** CC4: Inescapable Entertainment (e.g. in-flight movies)	**STORE** CC3: Popular Entertainment (e.g. cinema-going)
ACCUMULATION (low hedonic, high Informational)	**INTERNET** CC6: Token-Based Consumption (e.g. spending Air Miles)	**STORE** CC5: Saving & Collecting (e.g. saving Air Miles)
MAINTENANCE (low hedonic, low Informational)	**STORE** CC8: Mandatory Consumption (e.g. local taxes)	**INTERNET** CC7: Routine Consumption (e.g. groceries)

At first glance, **Figure 16** is perhaps unsurprising, mirroring in part the earlier findings in respect of P_1. As will be recalled, accomplishment and pleasure shopping were found to be heavily store-dominant; accumulation shopping too appeared to display a strong habitual tendency to use traditional store-based formats, but it was also observed that the remote channels in combination accounted for an almost identical proportion of all accumulation purchases; and maintenance shopping, by contrast, was found to be a predominantly remote activity in respect of apparel purchasing, with the Internet rapidly supplanting the print catalogue as the preferred mode of purchase.

However, closer inspection of the eight CCs suggests that the dichotomisation of the four original operant classes of consumer behaviour on the basis of the open-closed scope of the

setting in which that behaviour is enacted reveals some interesting qualifiers to the initial conclusions on channel usage tendencies. On the one hand, division of the accomplishment and pleasure classes by setting scope does not disturb the apparent dominance of the traditional physical store. Accomplishment shopping, by definition, demands a degree of public status display, or conspicuous consumption, so the high street store or mall is the ideal arena within which to enact this practice. Of course, it may be anticipated that this dominance may dissipate to some extent in closed settings where consumer choice is more under the control of the retailer, but closer inspection of the diaries quickly revealed that this was not the case; indeed, the vast majority of closed accomplishment shopping episodes documented took the form of instances where consumers were seeking, say, exclusive designer goods available from selected outlets only, the very act of being "seen" frequenting those outlets, or even just possessing their carrier bags, becoming an act of conspicuous consumption. Pleasure shopping, a mode of purchasing that is inherently hedonic and personal with no drive toward status display, remained the most concrete classification of all in respect of channel dominance, the "selfish" nature of the activity making the stimulus-rich environment of the store or mall the preferred shopping location irrespective of scope.

On the other hand, scope dichotomisation proved particularly revealing when considering the lower-level accumulation and maintenance classes of consumer behaviour. Earlier in the chapter, it was noted that the physical store accounted for around half of all accumulation purchasing activities but, despite the 2:1 ratio of Internet purchases to catalogue purchases, it would nevertheless be unwise to classify this a predominantly store-based activity given that an almost equal number of accomplishment shopping episodes involved non-store retail formats. However, accommodating the additional variable of setting scope takes us closer to understanding the precise circumstances under which store and non-store options may prevail. In open settings (CC5), the store continues to dominate as the preferred retail channel, a trend inspection of the diaries would suggest is attributable to a combination of factors. Most prominently, perhaps, this relates to the seasonal "sales" periods operated by retailers, which are typically more aggressive in traditional retail outlets than via remote channels, consumers seeking "bargain buys" in respect of a number of apparel and fashion purchases, including replenishment of everyday items that would normally be accommodated within the maintenance class. It also encompasses a substantial number of purchases associated with accumulation of "loyalty card" points; a practice that may at first seem more associated with closed settings, but is in fact more open in scope due to the tendency of consumers to acquire such cards from several retail organisations and to use them in a very selective and strategic manner. In closed settings (CC6), the store's dominance begins to wane and remote channels in general, and the Internet in particular, begin to acquire an advantage under such circumstances; a phenomenon the narrative content of the diaries would suggest is attributable to factors such as: the efficiency of the

Internet as a product search/evaluation tool when pursuing a "bargain"; the increasing ability to acquire a saving by paying store credit card accounts online as retailers strategically seek to manage transaction costs in this are by reducing the need for consumers to visit a retail store for this purpose; the growth in the inclusion of loyalty card management facilities within retail websites, allowing consumers to both monitor and spend their accrued "rewards" remotely; and the growing tendency among Internet "savvy" consumers to sample goods in a retail store, but then seek a "better buy" online. Thus, whilst the initial data on operant class suggested no real dominance of either store or non-store channels within this context, the CCs highlight the extent to which each are predominantly associated with either open or closed behaviour settings and yield insight into the precise circumstances surrounding these two categories and their channel-specific associations.

Finally, consideration of the subdivision of the maintenance-level operant class on the basis of setting scope offers yet further insight into channel specificity. In the initial class analysis, it was noted that remote channels dominated maintenance shopping activities, at least as far as the apparel sector was concerned, the Internet channel becoming by far the preferred mode of purchase. This was interpreted in terms of the somewhat routine and mundane nature of such shopping, often merely centred around activities such as the replenishment of repeat-purchase staple items (e.g. underwear, work wear) and/or the payment of credit accounts online (in this case, without being incentive-driven). However, as was the case for accumulations shopping, these channel-related trends do not survive dichotomisation of the operant class by scope. In open settings (CC7), the Internet dominance persists for the reasons outlined previously. In closed settings, however, the traditional retail store again resurfaces as the preferred mode of purchase; an observation that examination of the consumer diaries would suggest is attributable to three key behavioural tendencies: (1) lack of trust in remote payment methods for functions such as credit card payments, consumers exhibiting this characteristic typically spending very little online anyway; (2) payment of credit card accounts whilst in-store for other purposes, highlighting the extent to which different operant classes of behaviour may be engaged in during the course of a single shopping episode; and (3) last-minute replacement of staple items, consumers who heavily indulge in accomplishment and pleasure shopping activities often neglecting lower-level consumption needs, an occurrence that may suggest that the saliency of reinforcement achieved during higher-level shopping acts may sometimes serve to attenuate environmental contingencies at a lower level as the reinforcing outcomes of the latter appear even weaker by comparison.

In sum, allocation of channel dominance patterns to their respective contingency categories can be regarded as supportive of the fourth and final research proposition, both the statistical data and their operant interpretation suggesting that different purchase channels are favoured in

different retail shopping situations. Moreover, the confirmation of this particular proposition, and the additional insights gained via the accommodation of the final scope variable into the framework, illustrates the potential explanatory power of the BPM when the effects of its constituent components are considered in aggregation.

Understanding the Multichannel Consumer

Chapters Three and Four have documented a programme of empirical work exploring the consumer use of multiple retail channels, the goal being to establish the extent to which the channel selection process is amenable to operant explanation. The former detailed the design and implementation of that longitudinal empirical programme, drawing heavily upon the research technique of quantitative content analysis, and culminating in presentation of statistical data derived from a systematic investigation of consumer channel usage by reference to core BPM elements. In recognition that acceptance of a radical behaviourist account of any behaviour cannot be made on the basis of quantitative evidence alone, however, this particular chapter has engaged in a qualitative interpretation of the trends highlighted in the said data in order to evaluate the extent to which those trends are concurrent with the BPM explanatory framework. On both accounts, the evidence available is broadly supportive of the four key research propositions formulated in Chapter Two.

P_1 examined the schedules of reinforcement at the heart of the operant explanation itself, consumer behaviour being regarded as directed toward the maximisation of positive reinforcement and/or the minimisation of aversive consequences. The BPM's bifurification of positive reinforcement into its hedonic and informational forms generates four classes of operant behaviour engaged in depending upon the relative high-low saliencies of each. As anticipated, these four operant behaviour classes were found to be associated with particular retail purchase channels, an observation that suggests that channel usage patterns vary according to their efficiency in delivering particular forms of reinforcement depending upon the situational context.

P_2 built upon the previous research proposition, noting the almost habitual association of channels with specific operant behaviour classes, a phenomenon that implies the operation of a unique individual learning history, the reinforcing consequences of past channel usage episodes serving to shape current and future channel selection decisions in an idiosyncratic manner. Interpretation of the Behaviourgram evidence appeared to confirm the operation of such a learning history by demonstrating an iterative and systematic revision of channel selection preferences over time, a finding confirmed by the involvement data and its implied individual differences in effort expended in using a channel in light of previous purchase experiences.

P_3endeavoured to move beyond the individual and to examine the degree to which operant behaviour may be environmentally contingent. It is a fundamental tenet of operant theory that factors in the immediate retail behaviour setting impact upon the individual, the consumer's learning history being applied situationally in order to identify those setting-level variables that have proven reliable discriminatory stimuli in the past, signalling the likely reinforcing consequences of available choice options. Again, particular retail channels emerged as being dependent upon particular categories of behaviour setting variable, the cues indicating availability of reinforcement varying between physical and virtual retail environments, and offering considerable insight into the manifest differences in the ways in which channels differ in both the stimuli serving to shape consumer responses and the situational contexts in which those responses are emitted.

Whereas P_1 to P_3 examined individual elements of the BPM framework and their channel specificity in an isolated manner, however, P_4 endeavoured to apply that explanatory technology in a more integrative way. By combining the varying forms of operant behaviour class and their reinforcing outcomes with the relative open-closed nature of the behaviour setting and its constituent variables, the BPM generates an eight-fold taxonomy of contingency classes (CCs) of consumer behaviour that, to all intents and purposes, constitute situation-specific outcomes of the person-environment interaction. Within the context of the present study, this integrative exercise was perhaps the most revealing of all. Not only did the previous observations in respect of channel specificity and its associated operant behaviour classes and discriminatory stimuli survive this combinatory application, interpretation of the resultant statistical data proved consistent with the radical behaviourist explanation of consumer channel choice. Moreover, it offered valuable insights into the extent to which individual patterns of channel usage may vary situationally according to the degree of control a retailer is permitted to exercise over environmental stimuli in any given shopping situation.

In sum, the empirical evidence supports acceptance of the research propositions formulated and suggests that an operant explanation of multichannel consumer behaviour is possible. Both individually and in combination, investigation of core elements of the BPM explanatory framework, together with their roles as moderators of channel choice, has revealed the extent to which the selection process engaged in by the consumer is the product of a particular person-environment transaction, each stage in the empirical programme directing attention toward particular aspects of that transaction and their purchase mode outcomes. The final task remaining in this chapter must, therefore, be to seek to combine these at times disparate layers of explanation to yield a parsimonious account of the consumer use of multiple retail channels. What follows is thus an attempt to re-engage with the results presented thus far for one final time in order to construct an integrated description of the consumer channel selection process that

endeavours to capture the precise circumstances under which a consumer is most likely to select one particular retail purchase channel in preference to others. Given the high degree of inter-dependency between the catalogue and Internet-based channels that became apparent during the course of the tracking period, however, it is perhaps helpful to structure this discussion of the observed channel selection criteria in two key sections only; store shopping versus remote shopping.

Whether measured in actual terms by reference to the proportion of purchases made during the course of this investigation, or in a more qualitative manner and inferred from the frequency with which the store was selected for the detailed descriptors given of individual shopping episodes, one of the most significant findings of this research is perhaps the degree to which the traditional high street store or mall remains the dominant mode of purchase for the majority of apparel consumers in the current cohort. The physical store is by far the "first choice" option under a variety of circumstances, surpassing all other retail formats.

Adoption of the store-based option is undoubtedly driven by the pursuit of positive reinforcement and, in general terms, its rate of selection is proportional to the magnitude of the reinforcing consequences available. Moreover, there is a powerful personal-pleasure effect in operation here, the likelihood of a purchase being made via the traditional store/mall increasing relative to the degree of hedonic satisfaction to be derived from either the act of shopping itself and/or consumption of the goods acquired during performance of that shopping act.

Overwhelmingly, the most common scenario for selection of the traditional store as the preferred mode of purchase is under those circumstances encompassed by the *Pleasure Shopping* operant class of consumer behaviour. This is the class associated with high levels of hedonic reinforcement, with informational reinforcement being a secondary consideration. In open retail settings, this is exemplified by the *Popular Entertainment* contingency category and is pleasure shopping in its most literal sense, enjoyment of the apparel acquisition process being almost as important a consideration as the purchase outcome itself. Where the setting is more closed and choice of alternative purchase venues or channels is more limited, this almost becomes shopping as *Inescapable Entertainment*, the consumer deriving enjoyment from the pleasurable emotions aroused from being in, say, an exclusive designer fashion store. In any event, this is shopping-as-entertainment, often a recreational pursuit in its own right.

The preference for the traditional retail store exhibited during pleasure shopping is also mirrored in the higher-level *Accomplishment Shopping* operant class and to only a marginally lesser extent. Accomplishment shopping, it will be recalled, is the operant behaviour class manifest during conspicuous consumption activities. In open behaviour settings, this takes the form of *Status Consumption*, the consumer "being seen" in socially desirable stores and purchasing higher-status

goods (particularly high-fashion products) being a significant source of both hedonic and informational reinforcement. In more closed settings, it is evident in *Fulfilment* activities, the consumer gaining equal pleasure and prestige from consuming goods obtainable in a very limited number of exclusive outlets; a case of less choice being more desirable, perhaps, as witnessed by references in the diary to *"wearing the most exclusive labels"* and their capacity to *"express who you are"*.

Store shopping is generally not the preferred mode of shopping in either the *Accumulation Shopping* or *Maintenance Shopping* operant classes of behaviour. Both are associated with low levels of hedonic reinforcement, although accumulation shopping is more effective in delivering informational reinforcement. These two behaviour classes have become firmly established as remote channel activities among consumers in this cohort, the Behaviourgram data implying some degree of intensification of this effect during the lifetime of the study. However, closer examination of the contingency categories suggests that, in both operant classes, the physical store is still the preferred mode of purchase under certain circumstances. For accumulation shopping, for instance, the store continues to dominate in open situations involving *Saving and Collecting*, an effect undoubtedly attributable to a substantial degree by the passion expressed among panel members for seasonal retailer sales and the opportunity to *"rummage through the mess and get a bargain – especially when your mate paid three times as much for the same thing a week earlier and is green with envy!"* Similarly, in maintenance shopping instances, the store is often adopted in the *Mandatory Consumption* contingency category, although the diary evidence would indicate this is in part an artefact of necessary or last-minute purchase acts, such as payment of a store card account that cannot be made by other means, or the "eleventh-hour" replacement of a staple item. Overall, however, the store may be considered a largely hedonically reinforcing mode of shopping, dominant in the upper portion of the operant behaviour class hierarchy to a considerable extent. But, what contextual factors best serve as discriminatory stimuli signalling that such reinforcement may be forthcoming via the store-based channel?

A key determinant prompting instigation of store shopping to emerge from the study was undoubtedly the incentive saliency of the target purchase. Mirroring observations elsewhere in the literature, consumers in this cohort are more likely to visit a retail store if they are seeking to procure goods for themselves, or for very young children, than when purchasing apparel products for third-parties, the probability of a store-based purchase also being greater during gift shopping in general, particularly in circumstances where the consumer derives pleasure from such an activity and/or the purchase made will confer some degree of social status upon on the "gift-giver" (Clarke & Belk, 1979; Heeler, Francis, Okechuku, & Reid, 1979; Ryans, 1977).

In the vast majority of cases, however, this is engagement in self-gift-giving (a "*treat*"), or to a lesser extent, obtaining a positive affective response from buying for others – rarely is the store the favoured option for more mundane or functional purchases (e.g. "*something for work*"), except

in the case of last-minute or emergency apparel buying (e.g. *"I suddenly realised I had no spare tights!"*). Such purchase specificity clearly suggests that hedonic reinforcement is playing a prominent role here and the diary evidence would indicate that this pattern remained stable throughout the duration of the study, except in instances where a store repeatedly failed to deliver the required reinforcing outcome and alternative means of purchasing were subsequently adopted on a normative basis (*"In the end, I gave up on the Metrocentre completely 'cos the shops never had my size...Now I stick to the Directory"*).

As may perhaps be anticipated, there was strong reliance upon setting-level variables in the process leading up to the act of purchase in what is, after all, a stimuli-rich behaviour setting. The principal variables serving as discriminatory stimuli appeared to fall into the physical-positive category, accounting for over half of all coding instances. The narrative content of the diaries was rich in references to physical characteristics of the retail environment, particularly where those characteristics appear to evoke positive emotional responses; presumably, via a process of classical conditioning (Russell & Mehrabian, 1978). Consumers frequently described being tempted by "warm" colours and "pleasant" scents, associating particular emotions with particular stores or brands. A clear preference for "subtle" lighting effects also emerged, rather than "cold" lighting, and their were extensive references made to the importance of tactile stimulation in determining the suitability of a garment, particularly where the goods purchased were described as "fashion" items. Visual stimuli also appear important, an *"eye-catching"* display holding a capacity to lure a consumer into a retail store. Music, perhaps the most studied of all setting variables, also appeared in numerous diary entries; generally speaking, *"slow and tranquil"* music was considered more relaxing, exerting a positive effect upon time spent in a store and the likelihood of a purchase being made, although there were clear age-mediated differences evident, with younger consumers expressing a preference for more bass-intense *"chart sounds"*. In all cases, however, the more a variable deviated from the conditioned optimal level, the more the situation was deemed to be aversive and alternate modes of purchase were therefore sought. Again, these observations are consistent with previous work in this area, particularly on the effects of environmentally-based situational variables and their impact upon consumer choice (e.g. Bellizzi & Hite, 1992; Bone & Ellen, 1999; Crowley, 1993; Donovan & Rossiter, 1982; Donovan, Rossiter, Marcoolyn, & Nesdale, 1994; Underhill, 1999; Yalch & Spangenberg, 1990b, 2000).

As suggested earlier, it appears likely that many of the physical setting variables serving as discriminatory stimuli during in-store shopping exert their effect via classical conditioning and the emotional responses evoked by particular environmental factors, as demonstrated by the references to "tranquil" music, "warm" colours and "pleasant" scents highlighted above. Indeed, the relatively high number of references to the intra-individual variables class that encompasses mood-congruent effects would also support this Pavlovian interpretation of the data, some 65%

of all references to I+ variables and 45% of I- variables in the diaries being recorded in store shopping episodes. This illustrates again the highly hedonic nature of the pleasure shopping operant class and the extent to which the retailer's skills in successfully managing the emotional texture of the retail environment may yield dividends in respect of competitive advantage. It also demonstrates the potential dangers inherent in this not insubstantial mood congruency in respect of the success or otherwise of the service encounter, an unsuccessful experience of a retail store holding a capacity to condition an aversion to that store that is both powerful and at times difficult to recover: *"That assistant was so obnoxious…I never set foot in Marksies again!"*

As the latter quote from a panel member illustrates, the store shopping episode has a perhaps predictable social dimension that appears a highly significant source of discriminatory stimuli. Although social-positive setting variables accounted for only 18% of all of the setting variables exerting influence in the physical retail store, this nevertheless represented 91% of all those said S+ coding instances recorded across the three channels – a highly significant effect.

The social dimension exerts a particularly potent effect in both pleasure and accomplishment operant behaviours. Store shopping is, quite simply, *going* shopping and, as such, it is a highly social activity. In the vast majority of shopping episodes codified under these two operant classes, the panel member in question was accompanied by a third-party or parties and, indeed, lone shopping was very much the exception rather than the rule. The actual reasons for this varied considerably, however, and a powerful age-mediated effect was evident. For younger panel members, the mall was often simply a place to "hang out", a social arena in which to meet friends, purchase outcomes often being little more than incidental. At the opposing age pole, the shopping "expedition" was often seen as a means of facilitating social contact, interactions with total strangers being a recurrent theme in the diaries where no direct shopping companion was available. Moreover, the mere presence or absence of others can exert a degree of effect, consumers of all ages often remarking upon a store being "too crowded" or "too empty", or else populated with individuals considered "too old", "too young" or of the "wrong type". The primary influence here thus appears to be one of social comparison, being seen in stores frequented by salient reference groups constituting a key source of informational reinforcement in many situations, and of hedonic reinforcement too in accomplishment shopping situations.

The effect of social comparison can at times be a potent one, as witnessed by the nineteen-year-old consumer who remarked: "I was going to buy this lovely pink top for the party… tried it on and everything, was really smashing…was just going to pay for it and I saw this really old woman buying the same thing so I put it back and went to Top Shop instead…God, she was ancient and must've been at least 30!" Comparison effects such as these were a constant theme to emerge from the qualitative engagement with the diaries and, once again, were broadly consistent with observations reported elsewhere (e.g. Bowlby, 1997; Graham, Graham, & MacLean, 1991; Hui &

Bateson, 1991; Lehtonen & Maenpaa, 1997; Raddick & Mullis, 1997; Sommer, Herrick, & Sommer, 1981; Sommer, Wynes, & Brinkley, 1989; Vanderbeck & Johnson, 2000).

Interestingly, the roles and forms of reinforcement delivered by shopping companions tended to vary across operant classes. In pleasure shopping episodes, the actual retailing experience is secondary to the social dimension itself. This is the archetypal *"Girls' day out in town"* and the act of shopping is often but one component in a more protracted leisure episode, choice of retail venue typically being determined by reference to other physical features of the mall or locality, such as the availability of restaurants, gym facilities, etc. The primary source of reinforcement is the hedonic outcome of that social accompaniment and purchasing behaviour is often less structured in respect of its target outcome. Where shopping does take place, the principal role of companions appears to be to deliver low-level informational reinforcement via verbal behaviour, encouraging the consumer during her selection of items and serving as confirmation of her choice, tastes in clothing, level of style, etc. This is particularly apparent in those situations where there is an occasion-related purchase outcome; e.g. selecting a new outfit for a wedding, a party, a job interview, etc.

In contrast to this, during accomplishment shopping episodes, third parties play a far more pivotal role. By definition, consumption of this nature is conspicuous and thus requires observation of either the process itself or its outcomes in order to maximise positive reinforcement. Under these circumstances, informational reinforcement is accentuated, unknown third-parties almost fulfilling an "audience" role to this act of theatre, with direct shopping companions being either willing or unwilling members of the "supporting cast". Reliance upon informational reinforcement delivered via verbal means is still in evidence, but the mere presence of these third parties can be sufficiently reinforcing – this is conspicuous consumption, and its is thus the third parties who render it conspicuous and convey social status and prestige, particularly in high-fashion spending situations.

At lower levels in the operant hierarchy, the social dimension is less prominent. In accumulation shopping situations, the seasonal sales are again a rich source of evidence in respect of the reinforcing properties of third parties. Shopping companions continue to serve a "feedback" need, reinforcing the choices made by the individual and generally contributing to the social occasion of the *"trip to the sales"*, whilst crowding serves a dual role as both a social and physical variable, eliciting a sense of excitement and pleasure, albeit the pleasure is tempered by the accompanying frustrations that a crowded store invariably brings. In maintenance shopping situations, however, the social dimension begins to diminish markedly. In open settings, other people are frequently a source of negative reinforcement rather than positive, amplifying the frustrations of an already low-incentive activity, while in closed settings they feature very little in consumer accounts. In the main, shopping companions are rare at these lower levels and largely

confined to distracter roles, accompanying an individual mainly in order to make an uninvolving activity marginally less dull.

The final class of setting variable capable of serving as a discriminatory stimulus is the temporal variable, albeit its effects are often somewhat marginal within the store or mall context. Although by no means an insignificant variable, there were remarkably few references made to time within the diaries accumulated in this study. Certainly, no particular effects were evident across operant classes and, as such, it is only possible to draw very general conclusions as to the role of temporal factors across the hierarchy and irrespective of scope.

In a sense, consumers in the current cohort appear to regard time as a commodity and how they choose to spend that commodity varies considerably. Irrespective of operant class, consumers appear to associate time in a less specific way, but, at the risk of oversimplification, the justification for any level of investment appears directly related to the degree of positive reinforcement achieved, be it hedonic or informational in character. A positive outcome was considered *"time well spent"*, whereas a negative outcome was *"time wasted"*. In respect of the former, a particular feature of the mall is the tendency to lose track of time in situations where reinforcement levels are high. Event proximity is also an issue; for instance, consumers reported being three times more likely to engage in store-based apparel shopping in the week immediately following receipt of a salary payment than during other times of the month.

However, it is also important to note the close relationship with other setting-level variables; e.g. the tendency to spend longer periods of time in a store where that behaviour setting is rich in positive physical and/or social reinforcement. Again, this is concurrent with the extant literature on temporal contingencies operating at the situational level, as is the degree to which aversive stimuli in other setting variable categories can appear even more negatively salient where a temporal investment appears to have been wasted. As one consumer remarked: *"Changing rooms are my pet hate… if you try something on and it doesn't fit, you've just wasted 4.6 minutes of your life in a cubicle reeking of somebody else's armpits!"*

The most significant finding of this study in respect of traditional retail formats, then, was probably the extent to which the traditional store or mall continues to prevail as the preferred mode of purchase among the apparel consumers comprising this cohort. It is the "first port of call" in the majority of retail shopping situations, a trend that remained stable throughout the tracking period, although there is evidence to suggest that use of that channel over alternative purchase options is perhaps becoming more strategic.

In particular, the store-based channel tends to dominate in situations characterised by a pursuit of high levels of hedonic reinforcement, typified by the more experiential and entertainment-based

aspects of the act of shopping. In situations where accompanying informational reinforcement levels are high, use of the store is consistent with the accomplishment class of operant behaviour, consumers seeking either to engage in overt conspicuous consumption practices in open retail settings visiting a large number of retail outlets; alternatively, in more closed settings, the consumer patronises a much narrower range of predominantly high-fashion outlets and derives fulfilment largely from post-purchase consumption of the goods acquired. At lower levels in the operant hierarchy, where hedonic reinforcement is correspondingly low, consumers favour the physical store as a purchase channel in a quite narrow set of circumstances only; most notably, in relatively open accumulation shopping situations, such as pursuit of a bargain in the seasonal retailer sales, or in closed maintenance shopping instances, such as payment of an account or the last-minute replacement of a staple item.

As may be anticipated, the store is a stimulus-intense environment, however, and a powerful effect is exerted by setting-level variables during the channel selection process, particular classes of such variables shaping the decision to purchase goods via the traditional retail store. Physical characteristics of the retail setting are especially important here, such as the location of the store and adjacent leisure facilities, or the more appealing "atmospheric" factors typical of apparel outlets, along with the incentive value of the target purchase. In general, consumers are more likely to visit a store and perform the act of purchase there where the target purchase is for personal consumption purposes, rather than for a third-party, and where the product itself is hedonic in nature (a "treat") rather than a purely functional item, although there is evidence to suggest that mall-based shopping is also the preferred mode of shopping during gift-buying, subject to the significance to the individual of the intended recipient.

Store-based shopping is also a highly social activity and lone-shopping instances for apparel products are in the minority, a trip to the mall or high street invariably constituting one component in a broader leisure experience. Time is rarely a consideration leading to selection of the retail store as a procurement channel, except in the case of last-minute purchases, and is typically regarded as an "investment" whose dividend is proportional to the level of hedonic reinforcement that is the consumption outcome. Overall, however, there is a predominant role during selection of the store-based channel for moderating intra-individual variables, traditional retail environments being a rich source of positive emotional experiences as pleasing stimuli in all setting variable categories acquire a capacity to elicit positive emotional responses via classical conditioning. For the store-based channel to survive, retailers therefore need to pay particular attention to the reinforcing outcomes consumers are seeking when visiting the traditional store or mall and the primary circumstances in which such visits arise, as defined by their operant behaviour class, and then endeavour to provide a retail behaviour setting that is rendered as closed as possible through careful management of those setting variables that are most likely to

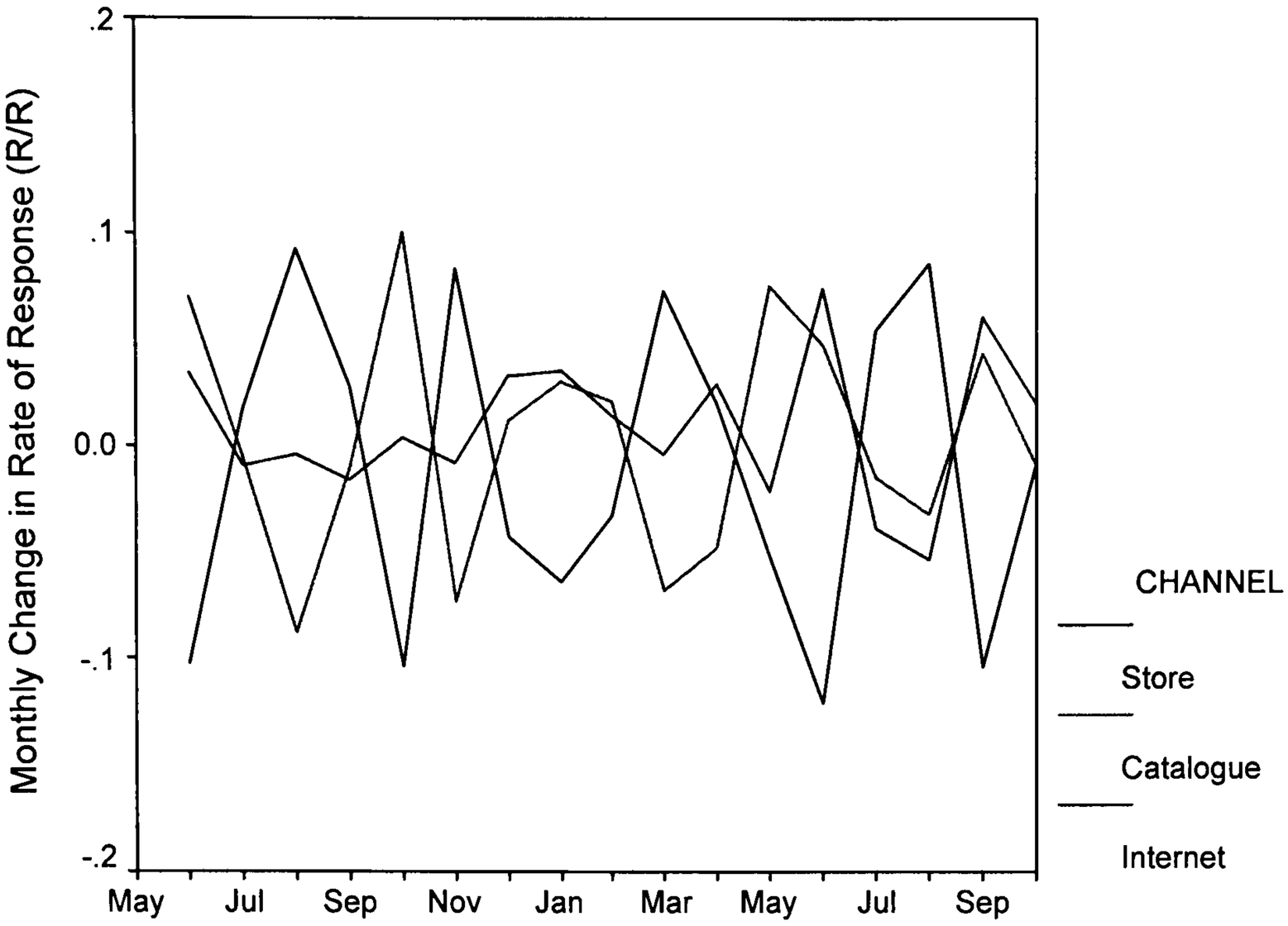
signal the positively reinforcing outcomes of performing the act of purchase within that environmental context. In short, a successful apparel store must be a pleasurable and entertaining venue in which to shop if it is to be an integral part of a successful multichannel marketing strategy.

At the outset of the empirical phase of this thesis, a general impression emerged from the initial exploratory focus group that the traditional mail order printed catalogue was continuing to persist as the preferred mode of purchase in remote shopping situations, participants devoting considerable time during that discussion to the perceived desirable qualities of high-end catalogues such as the *Next Directory* and, in parallel to this, to the more negative aspects of the Internet-based purchase option. Indeed, both the researcher and the transcribers were left with a view of remote shopping as still constituting a predominantly catalogue-based activity, any growth in use of electronic purchase channels appearing an almost grudging trade-off made on the basis of relatively few perceived benefits.

During the course of the tracking period, however, it became quite apparent that this initial impression on the part of the researcher was somewhat misguided and, in fact, the diary evidence in particular began to quickly reveal that an evolutionary process was being observed such that catalogue and Internet purchasing were becoming more interdependent and complex in their degree of interaction. For the purposes of this discussion, it would thus not only be unhelpful to consider these two channels in isolation; in fact, it would be almost impossible.

To illustrate this interdependency, it is perhaps useful to begin the discussion by reproducing the aggregated Behaviourgram derived from monthly variations in the rate-of-response (**Figure 17**, below). As the Behaviourgram illustrates, initial channel usage patterns were heavily store and catalogue interdependent. A purchase mediated via a catalogue was, on the whole, largely made at the expense of a purchase in the traditional retail store, and vice-versa. Internet shopping was somewhat experimental, with no clear relationship being evident with other channels. By the mid-point in the study, however, the Internet option had begun to almost shadow the catalogue, the degree of convergence between the two by the close of the tracking period having stabilised such that catalogue and Internet appear to be being used in an almost strategic manner as some form of combinatory remote shopping alternative to the traditional retail store. But, why?

Figure 18: Aggregated Behaviourgram of Channel Usage Over Time



To begin to resolve this riddle, a useful starting point is to consider the reasons why each of the two remote purchase options may be selected and then seek to extract from that discussion likely determinants of remote channel convergence. Beginning with the print catalogue, it is accurate to say that shopping via this channel did not significantly decline during the tracking period and this remains a prominent shopping option. At the same time, however, the narrative content of the diaries began to suggest that the actual *type* of catalogue being used for apparel shopping by this cohort has changed markedly over a relatively short time. In the early diaries, it is clear that a variety of catalogues are being used by panel members, options such as the *Next Directory* coexisting alongside more traditional home shopping catalogues operated by mail-order only retailers. By the closing stages of the study, however, this latter form of catalogue has all but disappeared from the diaries, the only catalogues being referred to by consumers being those that are operated by traditional high street retailers alongside their store and Internet purchase channels (*Next, Marks & Spencer,* etc).

On the one hand, this apparent effect could simply be a consequence of awareness among cohort members that the current research was a multichannel investigation. At the same time, however, it seems highly likely that at least a proportion of the effect could be attributable to increasing acceptance of the multichannel business model among consumers and the beneficial effects of channel synergies such a model can bring.

To explore this possibility further, it is necessary to examine the differences that persist between channels a little more deeply, particularly those between the two remote channels. If the

catalogue and Internet *are* being used in a more integrative and strategic way as store alternatives, how and why is this happening? Put another way, what are the differentiating factors between the two channel selection outcomes?

To begin with the print catalogue option, this channel appears to be used predominantly in shopping situations where the purchase behaviour falls into the lower classes in the operant behaviour hierarchy. Around 38% of all catalogue-based purchases were classified as maintenance shopping episodes during the diary content analysis, suggesting a prominent role for low levels of hedonic and informational reinforcement. This would tend to imply that the catalogue was preferred for more mundane and routine purchases and, indeed, a *slight* bias toward functional purchases can be detected in the diaries, the most common goods sought being staple items such as underwear, non-fashion shoes and the now almost ubiquitous *"pair of black trousers for work"*. Further, if the contingency category that is the behavioural outcome of a shopping situation is taken into consideration, it appears that a majority of these maintenance purchases are being performed under circumstances classifiable according to the closed class of behaviour setting; i.e. mandatory consumption. Not only are these staple items, they are often deemed to be essential items by the consumer and show a tendency toward repeat purchasing from the same retailer. That is, the consumer has extensive previous experience of, say, *Next* black trousers or *Marks & Spencer* underwear and is simply habitually purchasing them via their single source. In other words, this appears a long-established behaviour on the part of the consumer and almost exclusively involves own-brand merchandise that the consumer has previous experience of.

At the next stage in the operant hierarchy, around 22% of catalogue purchases involve accumulation shopping and, again, the emphasis is on closed settings rather than open settings and in a manner that is even more pronounced than during the maintenance class. The tendency here is toward token-based consumption which, in the context of apparel purchasing, typically involves the spending of points previously accrued across channels on some form of retailer loyalty card or, in more open settings, toward collecting/saving in instances where the goods required are functional, low in involvement and being accumulated for future use; e.g. the purchase of basic items for a forthcoming holiday or a child's new school uniform for an approaching academic year.

Moving further up the hierarchy, however, it becomes clear that it would be wrong to presuppose that the catalogue channel holds appeal for functional purchases only. In fact, a further 22% of purchases made via this format can be classified as pleasure shopping instances, although the ratio of closed-to-open settings involved here is roughly 2:1. This suggests that the consumer is engaging in a more pleasurable purchase selection activity, directed toward pursuit of hedonic reinforcement, but that some particular situational factor is necessitating catalogue purchase when some other channel, probably the physical retail store, would in fact be preferred; e.g.

because time constraints do not permit a trip to the shopping mall or because the size/colour has been established as being unavailable by other means.

At the peak of operant hierarchy, only around 17% of accomplishment shopping activities are mediated via the mail order catalogue, the closed-open ratio here being over 3:1. Although at first glance it may seem strange that a form of shopping most closely associated with the pursuit of combined hedonic and informational reinforcement through conspicuous consumption behaviours could be conducted via remote means at all, examination of the diary content quickly provides an explanation for this pattern. In almost every instance, the consumer appears to be procuring high-fashion goods from designer retailers and either purchasing exclusive brands that are not available by other means or, alternatively, is circumventing geography in instances where the spatial location of such a retailer's actual physical store or boutique is inaccessible or impractical.

Catalogue shopping, then, declines gradually as the significance of positive reinforcement to the consumer rises. Although there is a slight bias toward the lower levels of the operant behaviour hierarchy, with the maintenance class boasting the larger frequency count, the majority of purchases fall into the accumulation and pleasure classes and, overall, it is not possible to detect any specificity in catalogue purchasing in respect of product class; the catalogue may be used almost equally for the purchase of both hedonic or functional items, with no clear preference emerging for either. However, as may be expected, there is a bias toward closed shopping situations, consumers procuring goods via traditional print mail order media in instances where – for whatever reason – other channels are inaccessible.

When comparing the mail order catalogue with the Internet-based purchase option, a subtle difference between the two channels begins to become evident. Again, a preference for remote purchasing at the lower levels of the operant behaviour hierarchy is apparent, but is in this instance even more pronounced, with around 78% of all Internet shopping episodes falling into the maintenance and accumulation classes only.

With regard to maintenance shopping, accounting for almost 50% of all online purchases, there is a strong bias toward more open behavioural situations, the open-closed ratio being nearly 2:1. In the main, consumers still appear to be replacing staple items via remote means, as was observed for catalogue shopping, with the diaries suggesting that the majority of buying is involving functional repeat-purchase goods.

Where the Internet begins to differ from the catalogue, however, is in regard to the actual sources from which such products are obtained. In catalogue shopping, this is repeat purchasing via a single source and on a fairly regular basis; i.e. the recurrent references to *Next* black trousers,

Marks & Spencer lingerie, and so on. In the case of the Internet, though, the range of sources increases markedly, consumers appearing to be more willing to seek alternative sources for staple items – especially low cost staple items – once confidence in using electronic media increases. Indeed, this latter point is crucial; the diaries would suggest that the majority of closed purchases in this category occurred during the early stages of the study when confidence in this emergent medium was still somewhat embryonic, familiarity with the Internet leading to a dramatic shift toward open online settings by the end of the tracking period. In other words, there is a distinct developmental pattern evident here, as witnessed in any adoption of innovation in marketing, consumer confidence in online shopping services leading to a more strategic use of e-shopping for the purposes of obtaining the "best deal" available on necessary (and at times almost "grudge") purchases – an observation which would also explain the high proportion of accumulation shopping episodes conducted online, the exact same growing confidence leading to increasingly strategic use of electronic shopping services in pursuit of savings and "bargains".

In the upper portion of the operant hierarchy, the Internet is seldom the medium via which pleasure and accomplishment shopping is conducted, these particular classes accounting for only 11% and 10% of online purchases respectively. On the whole, the diary evidence would suggest that this is in part attributable to a poverty of positive hedonically reinforced online purchase outcomes being contained within the individual's learning history, the fact remaining that this is a comparatively recent innovation and consumers simply have not had sufficient experience of it for a habitual response to develop based upon a conditioned association with pleasure. In effect, they still display a tendency to "play it safe" when it comes to Internet shopping, reserving the channel for low-cost functional items, rather than to procure a "treat" or enrich their social status. Nevertheless, it is important to recognise that the data are still indicating that one-in-five purchases are falling within the pleasure and accomplishment classes of behaviour – a fact that appears to arise for similar reasons to the adoption of the catalogue for such purposes (e.g. exclusive goods only available online, geographical obstacles to visiting a designer boutique, etc.), although there is some evidence available to also suggest that the very act of shopping online can in itself convey some degree of status upon an individual, an effect articulated by one low-income participant who remarked: *"You do kind'a feel a bit special when your neighbours see stuff you've obviously got from the 'net being delivered... sort of like you're more sophisticated than them 'cos you got Tesco online coming to y' door!"*

On balance, then, catalogue and Internet shopping are probably more similar than they are dissimilar. Both tend to be favoured more for low-level purchasing activities, often in relatively closed situations where alternative options are unavailable for whatever reason, and the principal drivers appear to be pursuit of very similar patterns of reinforcement. That said, the Internet has yet to acquire some of the more pronounced pleasurable associations boasted by "high-end"

apparel catalogues, as witnessed in the slightly lower incidences of pleasure and accomplishment shopping activities undertaken via electronic means. This is evident in the fact that the Internet is principally associated with the purchase of functional items, whereas the print catalogue can be a medium for procuring more hedonic items also under certain circumstances.

Given that the differences between the two remote channels are comparatively low in respect of their reinforcing outcomes and associated operant behaviour classes, it seems reasonable to suppose that situational factors may play a significant role in shaping selection between each, an effect likely to be largely determined by the patterns of setting variables serving as discriminatory stimuli. That is, because the channels are broadly similar in the reinforcing outcomes they may efficiently deliver, it can be suggested that the most likely determinant of selection between the two will be the nature of the discriminatory stimuli guiding identification of the remote channel that may most efficiently deliver reinforcement in the current situation.

In instances where the traditional print catalogue option is favoured, positive physical, temporal and intra-individual variables in the behaviour setting appear to play a significant role in shaping selection of that channel for the act of purchase, accounting for 35%, 21% and 17% of all codings respectively. In respect of the physical variables category, recurrent themes in the consumer diaries centred around the layout and form of the catalogues typically favoured by the consumer, although the effects of such variables again tend to be tempered by intra-individual variables also. Consumers frequently remark upon the luxurious nature of such catalogues, for instance, or note the extent to which a catalogue such as the *Next Directory* may make them feel "special". Such media also appear to be significant sources of vicarious pleasure and consumers will often become engrossed in them as a form of entertainment in their own right, spending considerable periods of time in search of original or unusual items: *"Nothing like curling up with me Directory and a glass of wine at the end of a hard day, can get lost in it for hours….fatal!"* On a broader level, the geographical locations in which catalogues may be accessed also confer some degree of advantage over electronic shopping media: *"You can read it on the plane or in the bath… can hardly do that with a web thing , can you? Can hardly print it all out, can you? Wouldn't say as much about you even if y'did. Sheath of papers isn't like being seen with a Directory."* Temporal benefits, of course, are somewhat more predictable aspects of catalogue purchasing. Consumers approve of the ability to place a telephone order via the majority of retailers' catalogues up to around 11pm and they particularly like the guaranteed delivery times within forty-eight hours that a now very much an industry norm.

On the downside, however, the low coding frequencies observed for variables in the social-positive category, and the high frequencies in the physical-negative and temporal-negative categories, simply reflect the long observed disadvantages of the medium over the traditional store-based channel in respect of issues such as poor quality illustrations/descriptions, the lack of

opportunities for sensory stimulation and physical examination of the garments required, the time-lag between purchase and delivery (and, therefore, between operant performance and reinforcing outcome), and the absence of a meaningful social dimension (Baiden, 2000; Braun, 1993; Darian, 1997; Gehrt & Yan, 2004; Lavin, 1993; Stell & Paden, 1999; Vijayasarathy & Jones, 2000).

This latter limitation appears particularly important to consumers within the current cohort, the lack of social contact – and thus the accompanying opportunities for verbal reinforcement from third parties – leading to particularly interesting "substitute" social behaviours becoming evident. Whilst retailers such as *Next* have long been aware that consumers share catalogues, a single *Directory* often been read by at least three independent households, what had not been appreciated was the extent to which consumers either read catalogues together and seek the opinions of others during the product selection process, nor the growing tendency to "mass order" goods and invite friends or family to help evaluate and select between products upon delivery. This suggests that the lack of as salient a social dimension as the high street store or mall represents not only a substantial disadvantage to consumers in catalogue shopping situations, but also that individuals may seek to develop informal strategies to overcome this particular disadvantage and thus engineer the presence of salient discriminatory stimuli that would otherwise be absent: *'It's great having a big delivery and getting your mates round and trying stuff on. You can mix 'n match stuff with stuff of your own and see what everyone thinks and it's like having the changing room in your own home, but better."*

Whereas catalogue shopping draws upon a number of categories of setting-level variables in order to facilitate purchase on the basis of as broad a range of discriminatory stimuli as can be identified or even engineered, Internet shopping represents a stark contrast at this level of analysis in that it appears to be dominated by only one principal class of behaviour setting variable exerting a positive effect upon channel selection; namely, the temporal-positive category of variable, accounting for around one-in-four of all coding instances. In situations where the Internet becomes the dominant mode of purchase, the second to fourth in the ranked categories of setting level variables are negative in form; i.e. physical (21.7%), intra-individual (19.8%) and social (15.9%) negative setting variables. This suggests that what ultimately "swings the balance" in favour of the Internet over catalogue shopping may actually come down to two overriding setting level discriminatory factors: (a) the saliency of one particularly powerful situational cue related to the "commodity" of time; and (b) the degree of "trade-off" engaged in by the consumer of this variable over other more negative aspects of the virtual shopping environment which, otherwise, would serve as potent discriminatory stimuli diverting consumers *away* from that medium.

In respect of the former, the Internet undoubtedly has a capacity to deliver a temporal dividend to the consumer, the only negative temporal factors evident in the diaries relating to factors that

are physical in form also, such as slow "load times" on graphic-intense Web sites or occasional frustrations experienced in accessing the Internet to begin with; i.e. they are temporal costs associated with complications arising from the intervening technologies. On the whole, the Internet is perceived by consumers to be a time-saving mechanism and this is manifest in a variety of interesting and sometimes novel behavioural forms. Consumers respond very favourably, for instance, to the ability to purchase goods electronically twenty-four hours per day and from any geographical location where Internet access is available. Numerous diaries record an expansion in time available to shop being made available to consumers, as witnessed by the high incidence of goods being purchased via the office PC, for instance, and the particular appeal online ordering facilities hold to "time poor" consumers across a range of occupational and social groupings, from the shift-working manual labourer through to the busy global executive. Indeed, in respect of the latter, the temporal dividend can be accentuated further as a form of discriminator stimulus where the medium is also employed in order to circumvent geography: as one consumer remarked, *'It's really brilliant for a lifestyle like mine. When I was in Beijing recently, for example, my sister took it into her head to get married the day after I was due back, so I just ordered a new jacket and shoes from there on the 'net and they were waiting for me when I got back. Suppose I could've done it with the Directory if I'd took it with me, but with foreign telephones being what they are and that, the 'net just made it SO mush easier!"* More mundanely, perhaps, later diaries in the tracking period clearly suggest a more strategic approach to online shopping and the commodity of time, several panel members having recognised that an online purchase can often arrive quicker than a catalogue one, for example, or taking advantage of electronic ordering facilities during retailer sales periods by, say, being up early and having an online order made out ready to hit the "submit" button on the Web site the moment the sales officially begin and electronic transactions become possible. One particularly mall-averse consumer even recorded on several occasions that she pre-selected goods online prior to a traditional shopping trip and planned her route on the basis of Web reports of "in stock" situations in order to minimise the time spent in a physical retail environment she habitually found aversive.

Despite these temporal dividends, however, it is very apparent from both the narrative content of the diaries and the coding of the setting variables referred to in them that a degree of trade-off is being engaged in here against factors in other setting variable categories that may otherwise serve as discriminatory stimuli signalling that the Internet would *not* deliver positive reinforcement. Consumers dislike many physical aspects of apparel Web sites and the Internet as a whole, for example, and there were endless references to frustrations arising from factors such as poor illustrations, lack of product information, too much information, low opportunities for sensory stimulation, difficulties in viewing goods on a PC monitor with third parties whose opinions would be valued, poor opportunities for social comparison, etc. Such observations have been widely reported in the extant literature as disincentives to adoption of online shopping channels,

from both environmental and cognitive perspectives, and this strongly implies that the Internet, at least in its current form, is *not* considered as novel and innovative shopping medium as one might assume (Alba et al., 1997; Athiyaman, 2002; Citrin et al., 2000; Darian, 1997; Donthu & Garcia, 1999; Eastlick & Lotz, 1999; Fotheringham & Knudsen, 1984; Foucault & Scheufele, 2002; Gehrt & Yan, 2004; Goldsmith & Flynn, 2004; Goldsmith & Goldsmith, 2002; Jayawardhena et al., 2003; Nicholson et al., 2001, 2002; Parsons, 2002; Perottii et al., 2003; Reardon & McCorkle, 2002; Reynolds, 1997; Salomon & Kopplemann, 1992; Schoenbachler & Gordon, 2002; Sultan & Henrichs, 2000; Swaminathan, Lepkowska-White, & Rao, 1999; Vijayasarathy & Jones, 2000; Vrechopoulos et al., 2001; Walsh et al., 2003). In respect of the present study, the Internet is probably the "third choice" channel option among members of the cohort, adopted only in instances where salient temporal cues to positive reinforcement outweigh those contained within the complex matrix of alternative negative stimuli that would ordinarily dissuade consumers from making a purchase under other circumstances.

Overall, the longitudinal nature of this study has revealed interesting emergent trends in remote shopping activities and shed light upon the complex, and at times highly strategic, manner in which consumers employ and utilise available non-store channels. In the present cohort, initial experimentation with emergent interactive media, consistent with adoption of innovations theory, has ceded to more stable patterns of interaction between the catalogue and Internet-based purchase options during the lifetime of the tracking period, a trend that clearly exhibits an evolutionary character and implies the operation of an idiosyncratic learning history.

The circumstances under which a consumer selects either a catalogue or the Internet as the preferred mode of purchase have become not dissimilar. Consistent with an operant explanation of channel choice, cohort members display a pursuit of positive reinforcement in both its hedonic and informational forms, as well as an avoidance of aversive consequences, although the levels of positive reinforcement are somewhat less salient than those attainable via store-based shopping activities and, as a consequences, the patterns of consumption are more consistent with those behaviours deemed to be at the lower levels of the operant class hierarchy, with only slight variations being evident between catalogue-mediated and Internet-mediated acts of purchase. Product class does play a role in selection between the two remote channels examined in the study, the traditional print catalogue being adopted for both hedonic and functional purchases, whereas the Internet remains confined largely – though by no means exclusively – to functional purchases only.

Given the narrow differences that have become apparent between catalogue shopping and Internet shopping in respect of both the forms of reinforcement they efficiently deliver and the operant behaviours consumers engage in when instigating that delivery, selection between the two options has become a predominantly situational effect, with a pivotal role being played by

behaviour setting variables. Catalogue purchasing displays strong positive effects being exerted by physical, temporal and intra-individual setting variables, a plethora of factors within these categories being capable of serving as reliable discriminatory stimuli, subject to the application of the consumer's individual learning history, shaping the likelihood of a purchase response being emitted. By contrast, Internet shopping, despite its recognised advantages in respect of activities such as product search/comparison or information-mediated learning, is typically characterised by an often extensive range of negative setting variables across categories that, without the intervention of a very powerful positive temporal dividend being signalled, would ordinarily divert the consumer away from electronic modes of purchase in favour of procurement of apparel products via more traditional print catalogue means.

In conclusion, the two remote channels are thus intrinsically linked, the particular matrix of setting-level factors available to consumers as potential discriminatory stimuli often being the primary reason for one remote channel being adopted rather than another during the course of a particular retail shopping situation. Moreover, when contrast with the description of store-based shopping presented previously, the overall impression appears to be that consumer channel selection is indeed amenable to operant interpretation and that the methodological approach of applied behaviour analysis represents a potentially viable empirical strategy via which to systematically explore human consumption processes and their situational determinants without recourse to mentalism.

5. CHANNEL SELECTION BY CONSEQUENCES?

'Dozens of consumer behaviour textbooks – every one bearing the stunning original title, 'Consumer Behaviour' (though not always correctly spelt) – scarcely mention consumers' behaviour at all. This is not, perhaps, because their authors think consumer behaviour irrelevant. It is simply that the prevailing paradigm for consumer research emphasises the alleged pre-behavioural determinants of choice...almost to the exclusion of the observable activities of those who purchase and use, give and receive, accumulate and dispose of social end economic products and services."

G.R. Foxall (1997a: 263)

Introduction

To paraphrase Watson (1913), this thesis began from a deceptively simple premise; namely, that *a science of consumer behaviour is possible.* Of course, the very use of the term "science" is in itself questionable for its appropriateness will, inevitably, depend upon the particular view of what it means to be "scientific" that one adopts. Within the context of the present thesis, just what form of science is this that advocates objective measurement on the one hand, but then engages in an interpretive – and potentially highly subjective – reduction of narrative material to a series of frequency counts on the other, explicitly rejecting hypothesis-testing and inferential statistical analyses into the bargain?!? If one regards science purely as pursuit of the scientific method then, clearly, it may be argued that the thesis has failed miserably in its stated aim of advancing "a science of consumer behaviour".

Yet, if a more inclusive construct of what it is to *practice* science is accepted - a construct that merely regards the scientist's role as being one of organising knowledge in a systematic manner in order to construct viable explanations - then it becomes possible to accept radical behaviourist frameworks as potentially "scientific" if, to paraphrase Einstein, the quality of those explanations reveal hidden things. Ultimately, all bodies of organised knowledge are social constructions on the part of their "organisers" anyway, deserving to be judged on their own terms according to the viability and parsimony of the accounts of phenomena that they yield. Thus, seen in this light, the application of radical behaviourism documented in this thesis may be deemed to have advanced *a particular form of scientific consumer psychology* if the application of its explanatory

framework has been systematic and generated a plausible account of its elected phenomenon (Ziman, 1991).

The principal goal of this "scientific" endeavour has been to shed light upon the consumer use of multiple retail channels via the adoption and systematic application of a contextual approach to consumer research. More specifically, the thesis has sought to step outside of the standard cognitivist paradigm currently dominating the consumer psychology discipline and to seek to construct a viable account of the purchase channel selection process from a radical behaviourist perspective.

By way of consolidation, this concluding chapter of the thesis seeks to evaluate the operant account of multichannel consumer behaviour generated herein and, in the process, to explore the potential validity and parsimony of radical behaviourism as a consumer research tool. The chapter begins by presenting a summative account of the conceptual and empirical work documented herein, with particular emphasis upon the behavioural perspective model (BPM) of purchase and consumption and its application in the study of consumer channel choice. This is then followed by a critical appraisal of the behaviour analytical strategy adopted in the thesis, with particular emphasis upon the limitations inherent in the methodology employed. Finally, the chapter proceeds to evaluate the broader contribution of the work in respect of current understanding of the operant nature of consumer behaviour in general, and the BPM interpretive technology in particular, the thesis concluding by considering the likely longer-term viability of radical behaviourism as a paradigm within the marketing and consumer psychology disciplines, identifying potential directions for future research in this area.

On the Operant Nature of Consumer Channel Choice

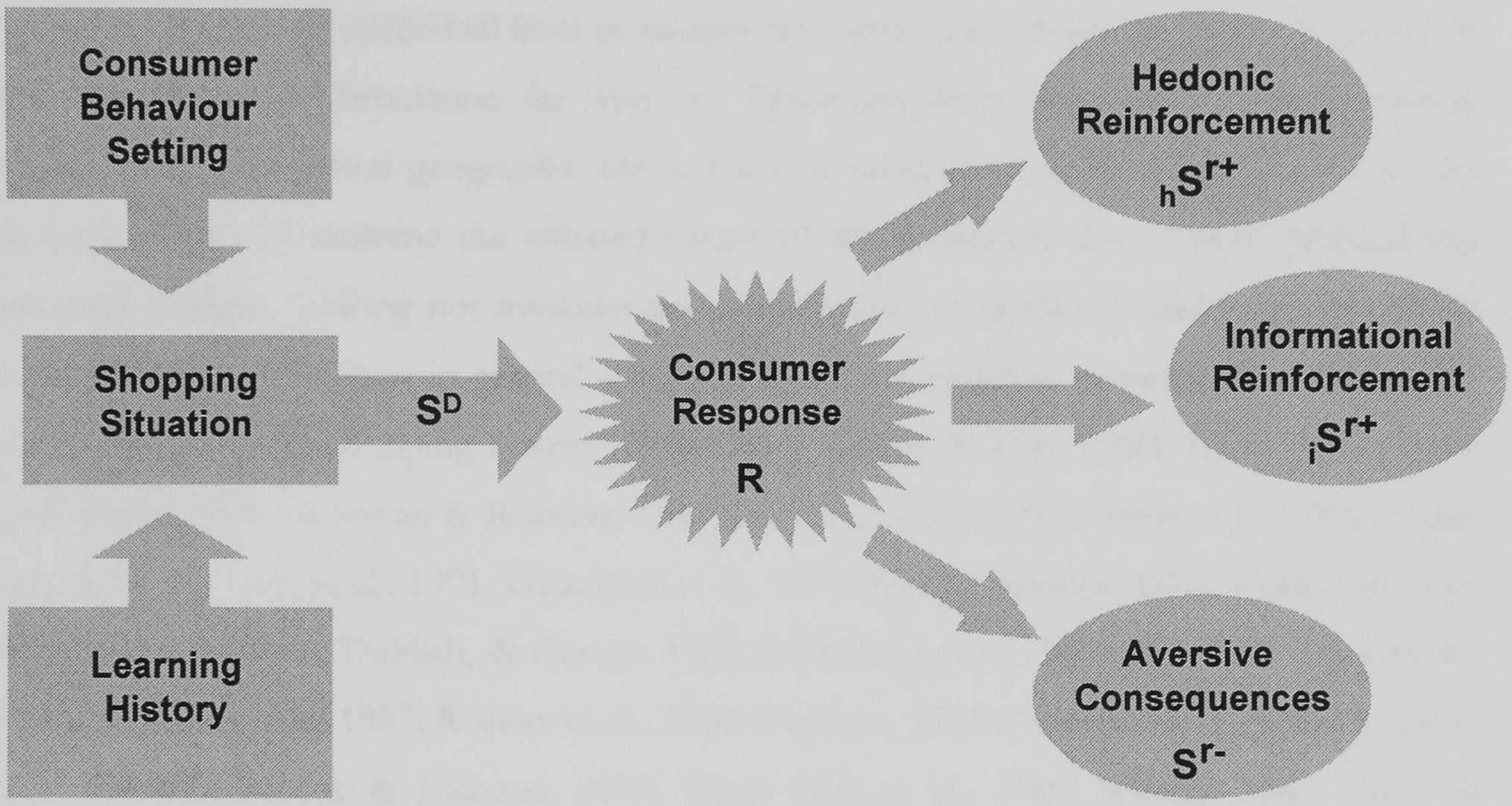
The research documented in this thesis has drawn upon the behavioural perspective model (BPM) of purchase and consumption, a radical behaviourist explanatory framework, in order to conduct a longitudinal investigation of consumer channel choice that is directed toward analysis of the person-environment interaction *without recourse to mentalism*. This is not to deny the validity of the cognitive paradigm, nor to endeavour to supersede it. It is merely to enrich the academic understanding of multichannel consumer behaviour as an emergent phenomenon via the adoption of a complimentary conceptual paradigm and, in the process, to seek to appraise the viability of operant learning itself as a mechanism capable of describing the nature of consumer adaptation to a turbulent retail environment, together with the inherently phenotypic character of that adaptation.

Chapter One set the scene for the conceptual and empirical work to follow by highlighting the predominantly cognitivist bias inherent in extant research in this area and its tendency toward investigation of largely pre-behavioural aspects of the consumer channel choice process at the expense of any meaningful consideration of the evolutionary nature of consumer behaviour and the extent to which that behaviour is contingent upon the environmental context within which a consumer consumes. A situational perspective was therefore advocated, focusing upon the complex transactional relationship between the individual consumer and the retail environment, Chapter Two proceeding to suggest operant learning as a potential mechanism via which this transaction may be mediated. The BPM was then identified as the principal explanatory framework presently available in the consumer research literature, a behaviour-analytical tool that locates the primary determinants of channel choice within the stimulus characteristics of the environment, albeit moderated via the application of an idiosyncratic learning history within the prevailing situational context as the consumer seeks to draw upon previous experiences of retail shopping situations of an identical or similar nature in order to predict the likely reinforcing consequences of currently available channel choice options. Chapter Two then proceeded to formulate four key research propositions to serve as a basis for subsequent empirical inquiry, Chapters Three and Four documenting a programme of longitudinal research conducted in association with a leading UK apparel retailer in which the consumer use of multiple retail channels was examined via both quantitative and interpretive means. The results of this BPM-directed empirical phase were broadly concurrent with the radical behaviourist perspective on person-environment contingent relationships, the layers of insight yielded by this applied behaviour analysis implicating a prominent role for operant learning during consumer adaptation to a changing, and increasingly volatile, retail environment. In short, the data presented in the preceding chapters suggests that, at least in broad Watsonian terms, a science of consumer behaviour is possible – a science that does not depend upon hypothetical mentalist structures but, rather, simply takes the measurement and interpretation of actual emitted (i.e. observable) acts of purchase and consumption as its elected subject matter.

To elaborate, the BPM represents locates the antecedents of behaviour largely within the stimulus characteristics of the environment and seeks to explain consumer choice processes by reference to operant learning theory (**Figure 18**). Framed within a broadly radical behaviourist standpoint, the BPM interpretive "technology" is concurrent with the Law of Effect in that it regards the consequences of any action as a key predictor of the likelihood of that action's repetition, an environmentally contingent effect conforming to the classic Skinnerian three-term contingency. In any given shopping situation, the BPM presupposes that the consumer is faced with a series of potential choice options in respect of the purchase responses that may be performed, the task facing the individual being to identify that single behavioural response that will maximise positive reinforcement in respect of its consequences and/or minimise negative reinforcement. To assist

in this choice process, the consumer looks to the retail environment for reliable cues, or discriminatory stimuli, that will best signal the likely reinforcing outcomes of the options available, her own unique learning history of previous experiences of identical or similar situations in the past being applied in the current behaviour setting in order to facilitate identification of those discriminatory stimuli.

Figure 18: Summary of the Behavioural Perspective Model (after: Foxall, 2003)



The basic premise of this thesis is that consumer channel selection can be explained by reference to this exact same BPM framework. In particular, it has been proposed that the consumer comes to associate a particular reinforcing outcome with a particular retail purchase channel, alongside any other stimuli that may constitute conditioned associations within such situations. Put another way, the central argument of the thesis is that, faced with a certain set of behaviour setting variables interacting with an idiosyncratic learning history, the consumer will come to rely upon a specific purchase channel under those circumstances through a process of operant conditioning, in much the same way that a rat in a Skinner box "learns" that a particular lever-pressing action will deliver a predictable reward or punishment when faced with a certain set of cues or signals.

On a conceptual level, it was noted at the outset that previous work in this area has been largely conducted at a macro level, standard market segmentation criteria and store choice rationales being applied in order to identify those broad classes of consumer most or least likely to adopt emergent interactive retail formats on the basis of their geodemographic, psychographic and

lifestyle characteristics. Significant though such approaches are, however, their focus upon the more distal pre-determinants of channel uptake diverts attention away from adequate investigation of the actual *process* of channel selection itself and the true nature of what consumers actually *do* when selecting between available retail purchase formats. Thus, by moving the level of analysis to a more proximal one, the present study has sought to direct research attention toward actual multichannel *behaviour*, rather than its antecedent predictors, and to move some way toward development of a more *contextualised* and *situational* understanding of this evolving phenomenon.

This is not to say that an individual level of analysis has been absent from the extant literature on multichannel consumer behaviour; far from it. Emanating from the fields of environmental psychology and behavioural geography, for instance, a number of studies drawn upon in this thesis have sought to examine the situated nature of the consumer use of both physical and virtual retail formats, making not insubstantial contributions to academic understanding of the role of environmental factors in general – and of situational variables in particular – during the course of the everyday shopping activity (Belk, 1975; Bellizzi & Hite, 1992; Bloch et al., 1994; Bone & Ellen, 1999; Donovan & Rossiter, 1982; Donovan et al., 1994; Gehrt et al., 1991; Gehrt & Yan, 2004; Graham et al., 1991; Grossbart et al., 1975; Hui & Bateson, 1991; Kakkar & Lutz, 1981; Nicholls, Roslow, Dublish, & Comer, 1996; Nicholson et al., 2002; North & Hargreaves, 1996; Raddick & Mullis, 1997; Roslow et al., 2000; Sommer, 1998; Sommer et al., 1981; Sommer et al., 1989; Vanderbeck & Johnson, 2000; Whan Park et al., 1989; Wicker, 1987; Yalch & Spangenberg, 2000). A particular limitation of such studies, however, has historically been the extent to which such investigations are typically format-specific, although a multichannel dimension has become more evident in later examples cited. More problematic still, perhaps, is the extent to which they have tended to emphasise the *variables* exerting influence upon consumer behaviour in shopping situations, rather than the actual *mechanism* via which those variables exert their effect. In adopting a more transactional perspective on retail shopping situations and seeking to apply operant learning principles in the study of multichannel consumer behaviour, it can therefore be argued that this thesis is an attempt to address this apparent limitation in the extant literature and thus advance understanding of the complex interactions between the individual consumer and the environmental contexts within which she consumes – an activity that is inherently dependent upon the forms of person-environment contingent relationships identified by behaviourism and described in this thesis.

A second major strand of literature available on consumer choice is that characterised by the now "orthodox" cognitive perspective in consumer psychology and embodied in its central tenets of the computational metaphor, human information-processing activities and functions, and the rationality or otherwise of individual choice. A number of cognitive models have emerged in the

literature over the years that seek to model the consumer choice process in sum or in part, either by reference to retail store selection criteria or product/brand choice (e.g. Caldwallader, 1975; De Shields et al., 1996; Engel et al., 1995; Foxall, 1980; Gatignon & Robertson, 1991a, 1991b; Hoyer, 1984; Jain & Vilcassim, 1991; Nicosia, 1966; Sheth, 1974). A minority of cognitive approaches have also now began to emerge that seek to describe aspects of the channel selection process (e.g. Athiyaman, 2002; Goldsmith & Flynn, 2004; Jayawardhena et al., 2003; Reardon & McCorkle, 2002; Schoenbachler & Gordon, 2002).

Again, however, there are two main problems associated with the extant literature in this area. Firstly, there is an unfortunate tendency to focus primarily upon the information-processing stages consumers apparently negotiate in formulating a decision and/or evaluating its outcome, thus reducing the analysis to largely pre-behavioural or post-behavioural events and not the *actual* act of consumer behaviour itself. Secondly, and related to this, the cognitive models developed all *accommodate* environmental influences upon the decision-making process, but are generally less explicit in their attempts to *explain* the processes via which such factors exert their influence except by reference to the processing of informational inputs. On both accounts, then, cognitive approaches to date have been somewhat lacking in the attention paid to the notion of the person-environment interaction at its most proximal level, and it is the central contention of this thesis that operant behaviourism represents one very promising explanatory framework that may inform academic understanding of the processes via which such a transaction may occur in an iterative and phenotypic manner.

In comparison to both major strands of literature, then, an operant perspective holds a potential to address a very apparent gap in knowledge with regard to consumer channel choice processes. The evidence presented in the previous two chapters strongly suggests that operant processes *do* play a role in channel selection and the manner in which that role is enacted is concurrent with the BPM's particular formulation of the classic Skinnerian three-term contingency.

Consumers in the present cohort have been found to be directed toward attainment of positive reinforcement in both its hedonic and informational forms, particular purchase channels being associated with particular patterns of reinforcing outcomes. Such associations emerge in a developmental manner through an evolutionary process in which the role of the individual consumer's own unique learning history is pivotal, both in terms of the extent to which the likely reinforcing consequences of the current choice situation are anticipated, or even habitually realised, by reference to the outcomes of identical/similar choice decisions in the past, and by the manner in which consumers appear to attempt to further enhance this prediction by reference to aspects of the prevailing retail behaviour setting, the learning history being applied in that setting in order to identify those setting-level variables that may most reliable serve as predictive discriminatory signals of available choice responses and their consequences. Moreover, these

setting variables in themselves also exhibit a high degree of channel specificity in their functioning as discriminatory stimuli, supporting the notion that what channel usage is really about is an attempt to identify and call upon that available retail format which, in the current retail shopping situation, will most effectively and efficiently deliver positive reinforcement.

A striking feature of the evidence presented in this thesis has been the extent to which investigation of core BPM elements, initially in isolation and then in aggregation, yields insights into different aspects of the channel selection process. Examination of the operant behaviour classes, for instance, highlighted the relationship between the reinforcing outcomes being sought by the consumer and the purchase channels she comes to rely upon to efficiently deliver those outcomes. Similarly, analysis of variations in the rate-of-response toward a channel over time demonstrated the dynamic and iterative nature of these associations, together with their almost habitual character, whilst exploration of the setting variables serving as the most common discriminatory stimuli for a particular channel illustrated the degree to which channel selection itself is environmentally contingent. Finally, when taken in aggregation, the data can form a basis on which to predict the contingency categories in which a specific channel tends to be favoured and becomes dependent upon environmental factors – a particularly important managerial observation, especially in those "closed" consumer choice situations in which the behaviour setting of the consumer is most under the retail marketer's direct or indirect control.

Useful though such a systematic examination of BPM factors may be, however, a drawback of this approach is that the explanatory content yielded has tended to be somewhat disparate in character, lacking a capacity to generate a comprehensive and parsimonious account of the channel choice process that accommodates *all* aspects of this process in a systematic manner. Therefore, in an attempt to overcome that potential limitation, Chapter Four concluded with an attempt to re-engage with the results presented in order to construct an integrated description of the consumer channel selection process that endeavours to capture the precise circumstances under which a consumer is most likely to select one particular retail purchase channel in preference to others.

At the risk of over-simplification, the traditional high street store or mall was identified as the primary mode of purchasing for apparel consumers in this study, a predominantly hedonic and personal act that is most evident in accomplishment and pleasure shopping circumstances. Particular patterns of setting-level variables signalling the reinforcing consequences likely from a store-based purchase have also been identified, aspects of the physical and social environment being especially salient in such purchase situations, albeit with often potent mood-congruency effects. Beyond the retail store, remote shopping was been found to be favoured in those situations where circumstances preclude store-based purchasing and is typically reserved for lower-level shopping activities. The catalogue is favoured for both hedonic and functional

purchases, with strong influences being exerted by physical and intra-individual factors, whilst the Internet is generally reserved for lower-level classes of shopping only that are of low reinforcement value. Over the duration of the study, however, these two remote formats were found to increasingly converge, often the only determinant of selection between the two in favour of an electronic purchase being those situations where the perceived temporal benefits of using the medium are perceived to be greater than the otherwise negative aspects of this still disliked medium for apparel shopping, the consumer diaries being littered with descriptors of the many aversive qualities of the Internet as a retail shopping channel.

In sum, this thesis has sought to examine the operant nature of consumer channel choice from a radical behaviourist perspective, engaging in a systematic and longitudinal application of the BPM's particular rendering of the Skinnerian three-term contingency. On the basis of both the quantitative and qualitative data summarised above, the channel selection process would indeed appear to be amenable to operant interpretation, particular retail channels being associated with particular patterns of reinforcing outcome, subject to the intervention of the individual's learning history upon the current behaviour setting in the search for reliable discriminatory stimuli signalling the likely consequences of each available channel selection option in the prevailing retail shopping situation. In short, the BPM has produced *an* account of consumer channel choice that is concurrent with the central tenets of radical behaviourism and a science of consumer behaviour appears *possible*.

Applied Behaviour Analysis

The account of the consumer channel selection process presented above, then, appears broadly supportive of the view that consumer channel choice is a function of a person-environment interaction, the selection of any retail purchase channel being a means to an end; i.e. the delivery of positive reinforcement. Taken at face value, the methodological strategy of applied behaviour analysis thus appears highly effective as an investigative tool for exploring the contingent relationships between the apparel consumer and the retail environment, yielding considerable insight into the consumer use of multiple retail channels and the operant nature of that usage. Nevertheless, despite the overall success of the strategy in addressing the particular research goals, it is important to add a qualifier at this stage in the discussion by highlighting potential limitations in that strategy that became apparent during the empirical phase of the thesis.

By way of context, it will be recalled that applied behaviour analysis is founded upon the radical behaviourist assertion that, in a truly "scientific" psychology, it should be possible to analyse and construct an explanation of a behaviour by reference only to those events directly observable by

the researcher and amenable to independent confirmation. With these principles in mind, the empirical work documented in Chapters Three and Four therefore sought to apply this pragmatic-positivist rationale and investigate consumer channel selection purely on the basis of "observables" alone. Thus, through a combination of statistical analyses and systematic interpretation, an attempt was made to formulate, investigate and evaluate clear research propositions derived from the operant perspective on consumer behaviour.

Many aspects of the general strategy adopted are relatively uncontentious, such as the adoption of monthly channel usage metrics as indices of the rate-of-response toward a channel or the inclusion of a longitudinal dimension in order to track changes in channel usage behaviour over time. A cautionary note must still be exercised, however, as certain aspects of the empirical strategy employed do require a degree of qualification.

As a starting point, for instance, it became apparent early on in the empirical period that there was an inherent problem in the construction of the consumer diaries such that it became difficult to relate the rate-of-response toward a channel to the descriptions of shopping episodes that the consumers presented in narrative form, a difficulty arising from the decision to request that participants describe only a single purchase experience per month in any depth. This undoubtedly led to certain biases becoming evident in the type of shopping episodes consumers elected to describe, such as the tendency to select store-shopping situations to document more often than those mediated via other retail formats, thus limiting the diary data available for analysis in respect of the catalogue and Internet channels. Although the proportion of purchases made via each channel is consistent with the proportion of shopping episodes selected by consumers for detailed description, suggesting that the proliferation of store episodes described is merely an artefact of actual channel usage instances and not a selection bias per se, it may in hindsight have been desirable to take further steps from the study outset to ensure that a greater proportion of narrative material relating to the two remote retail channels was accrued.

Following on from the above, a similar observation may also be made in respect of the sources of the goods procured that were documented in the diaries, some 40% being made via *Next* themselves across the three channels. Upon reflection, it may have been advisable to seek several retail organisations as research facilitators to counter this potential bias, or else to find a means by which the host retailer's identity could have been better disguised. Again, however, a degree of trade-off was deemed necessary in respect of enabling the research to be conducted in this way, the support of *Next* being crucial to both the recruitment and retention of the cohort investigated.

A potentially more contentious issue perhaps lies in the fact that the methodology developed relied heavily upon the use of quantitative content analysis in order to generate statistical data on

the basis of the narrative material collected in the monthly diaries. As a number of authors point out, this can be criticised as leading to a degree of subjective bias becoming evident on the part of the researcher because, in effect, a degree of structure is being "imposed" upon the material examined which was never intended by the authors of that material (Brown & Reid, 1997; Cloke et al., 2004; Cresswell, 1994; Kassarjian, 1977; Kolbe & Burnett, 1991).

A superficial response to such concerns would, of course, simply be to retort that *all* research suffers from this potential limitation. A physicist investigating the behaviour of sub-atomic particles will structure his/her data collection methods in a particular way in order to investigate that phenomenon, for instance, then engage in an informed interpretation of the statistical evidence yielded on the basis of the available literature, whilst a consumer psychologist interested in the effects of a particular personality characteristic upon retail store patronage will invariably choose a metric of that construct and interpret the results by reference to an appropriate body of extant knowledge. There is nothing unique about either content analysis or applied behaviour analysis in respect of such concerns. Nonetheless, although attempts were made to minimise the possibility of researcher bias through careful specification of analytical protocols and the use of third-party data analysts, the fact remains that the narrative content of the diaries were examined by observers familiar with the BPM explanatory framework and, on balance, it may be advisable to employ naive coding assistants also in any subsequent replication to further reduce the risk of subjective bias upon the part of the analysts. At the same time, however, the current behaviour analysis required *both* the statistical data and the trends revealed in those data to be amenable to operant interpretation for any research proposition to be deemed to have been supported, a requirement that should ensure that the findings reported are no less valid as a result of these coding concerns (Caro, Roper, Young, & Dank, 1979; Hollenbeck, 1978; Page & Iwata, 1986).

The whole process of engaging in statistical analysis of data within the context of a radical behaviourist investigation is, by definition, highly problematic anyway. Radical behaviourism explicitly rejects hypothesis-testing and statistical inference due to the risks inherent in manufacturing and perpetuating "explanatory fictions" whereby false theoretical propositions may come to be accepted as established "fact" purely on the strength of repeatedly confirmed research hypotheses. As Skinner (1988b: 103) himself observed: *"Behavior is one of those subject matters which do not call for hypothetic-deductive methods. Both behavior itself and most of the variables of which it is a function are usually conspicuous... If hypotheses commonly appear in the study of behavior, it is only because the investigator has turned his attention to inaccessible events – some of them fictitious, others irrelevant."*

On the other hand, however, the associated methodological strategy of applied behaviour analysis is an approach to inquiry that firmly favours quantification wherever possible, achieved via implementation of a pseudo-experimental research design, albeit reinforced by interpretive engagement with the data and/or use of interpretive methods in instances where the data cannot

be obtained by quantitative means. These two at times competing requirements are not always easy to reconcile, but it was important to attempt this reconciliation in the current empirical work in order to evaluate the BPM within an appropriate frame of reference.

The key point to note here is that the statistical methods employed were used in an *exploratory* manner only, rather than a hypothetico-deductive one, with no research and null hypotheses being formulated and tested. The statistical tests themselves were low-level and non-parametric, used by reference to probability theory in order to identify significant trends in the data only and *not* to infer that the results obtained are in any way generalisable to the broader population. Indeed, in radical behaviourist terms, the cohort examined may be deemed to constitute the aggregate population in its own right, the underlying philosophy being to regard each "experiment" as a single-population study. General laws may emerge as a result of successive replications on different populations, but this is not the principal goal of the research. The aim is simply to understand and to explain the behaviour of the particular population under investigation, an approach that is by no means unique to behaviourism and, indeed, can be found in other paradigms such as ethology (Lehner, 1979; Martin & Bateson, 1993).

This in turn raises issues surrounding the practical value of the specific approach adopted in this study, and of behaviour analysis in general. Again, the radical behaviourist approach invariably raises issues of this nature and there are no "easy answers" currently available. In this investigation, there are obvious limitations in terms of both the sector selected as a research context and the single-sex nature of the cohort. In respect of the former, apparel purchasing *does* appear an appropriate context for this research because it is rich in instances of both hedonic and functional consumption activities, allowing extensive exploration of key BPM concepts within a wide variety of retail shopping situations. It does, however, mean that caution should be exercised in drawing any firm conclusions in respect of multichannel consumer behaviour in other retail sectors, such as grocery shopping, music procurement or the purchase of airline tickets, or in seeking to apply the particular research strategy developed in this thesis within those contexts. With the regard to the female-only panel employed in the research, this is a not insubstantial limitation in view of the fact that significant sex differences have previously been identified in respect of a range of key behavioural phenomena, such as the saliency of situational effects upon behaviour and the sex-related effects evident in cognitive processes such as attention, perception and spatial ability (Campbell, 2002). On this basis, the question could legitimately be asked as to whether *any* of the effects reported in this thesis would be equally applicable in another cohort.

The answer, of course, is that radical behaviourism does not seek to generalise, so the observations made in this study should not be used in any inferential way. They apply solely to the present study and its population. This in itself, however, raises the more salient question as

to the degree of *practical* value of applied behaviour analysis as a consumer research tool, given that it is an exploratory investigative strategy only and is not amenable to generalisation and inference.

Although there is a degree of justification in asking such a question, however, it can equally be argued that applied behaviour analysis *is* a valid empirical strategy to adopt if only because it can shed light upon complex consumption activities by virtue of its intensive single-population approach, enabling the researcher to get closer to the process being investigated and identify degrees of effect that may otherwise be unobtainable or inaccessible via other means.

More pragmatically, perhaps, it should also be born in mind that there is no reason why the principle findings of such an approach should not be investigated further by other non-behaviourist means, the main strength of the approach adopted in this thesis perhaps lying in its capacity to facilitate intensive exploratory research. Seen in this light, applied behaviour analysis can be regarded as a potentially powerful research technique, particularly in instances where replication is possible and general laws and principles begin to emerge, and it is this exploratory dimension that was the specific rationale underpinning its application in the present study – an application which, with the above limitations and qualifications in mind, may nevertheless be deemed to have been broadly successful, at least in terms of the degree of detail evident in the accounts of the consumer use of multiple retail channels developed in this thesis.

The Behavioural Perspective Model

The preceding sections of this chapter have sought to begin to address the first two stated objectives of the current thesis, namely: to shed light upon the consumer channel use of multiple retail channels, together with the factors underlying the channel choice process; and to yield insight into the evolutionary and adaptive nature of consumer behaviour in a multichannel retail environment and the potential role of operant learning as a mechanism facilitating that adaptation. In light of the discussions presented thus far, and with the above methodological limitations in mind, the evidence accumulated during this research programme appears broadly supportive of the notion that consumer channel choice is an operant process, application of the behaviour-analytical strategy developed highlighting the extent to which consumer channel selection is situational, iterative and, at least in part, environmentally contingent. At the thesis outset, however, a third research objective was also identified, the intended multichannel application of the BPM explanatory framework – hitherto employed largely within more traditional retail contexts only – presenting an opportunity to seek to contribute to the ontological and epistemological development of that conceptual framework, and to the radical

behaviourist approach to consumer psychology in general. It is thus to the examination of the research in respect of that third and final objective that the thesis must now turn – an objective which, given the pivotal role of radical behaviourism throughout this investigation, has become fundamental to a comprehensive evaluation of all three stated objectives, and to the overall contributions of the thesis to academic knowledge.

As discussed repeatedly, the basic premise of radical behaviourism, together with explanatory frameworks such as the BPM derived from that paradigm, is that it is possible to construct a viable account of the behaviour patters of any single population via objective observation, quantification and scientific interpretation without recourse to mentalism. In other words, within the context of the present thesis, it is presupposed that an explanation can be constructed of consumer channel choice that does not rely upon introspection upon the part of population members but, rather, is constructed from evidence that has been independently and objectively collected in a quasi-experimental manner. Moreover, the quality of explanation developed through this process of applied behaviour analysis should yield sufficient insight into the behavioural events under investigation as to constitute a meaningful and parsimonious account of that phenomenon.

As an interpretive tool, there can be little doubt that application of the BPM to the particular issue of multichannel consumer behaviour has revealed significant insights into the consumer channel selection process and its operant character that are, in the main, concurrent with the economically expedient framework of the three-term contingency. Consumer channel choice indeed appears to be directed toward maximisation of positive reinforcement, mediated via a situation-level transaction between aspects of the retail behaviour setting and the individual's own unique learning history, the research undertaken informing understanding of facets of consumer channel choice such as the role of setting-level variables as discriminatory signals and the almost phenotypic manner in which behaviour is shaped iteratively over time through successive encounters with the retail environment irrespective of its scope. Most significantly of all, perhaps, it has also demonstrated the extent to which the degree and form of reinforcement realised comes to be associated with the individual purchase channel that most consistently and efficiently delivers it, rules and habits being acquired through operant learning that serve to guide channel selection in a systematic manner in subsequent retail shopping situations.

Despite the "ease" with which the observations documented within this thesis lend themselves to operant interpretation by reference to the BPM organising framework, however, they are nevertheless equally amenable to explanation via alternative, non-behaviourist means. As noted previously, for instance, a cognitive psychologist may seek to frame consumer channel selection within a decision-making framework, directing research attention toward those perceptual, attentive and evaluative information-processing activities the consumer may engage in when

determining what to buy, where to buy it and *how* that act of purchase might most efficiently be achieved, subject to any extrinsic factors exerting influence upon this intra-individual computation. Conversely, an environmental psychologist may look beyond the individual and seek to locate the principal determinants of channel choice almost exclusively within the retail context within which the consumer consumes, a conceptual approach that is not dissimilar to the manner in which the radical behaviourist regards discriminatory stimuli as shaping the act of purchase in an environmentally-contingent manner. Both approaches would be valid strategies via which to explore the phenomenon of multichannel shopping, each yielding a particular level of insight and informing consumer psychology as a whole. Both, however, would also suffer from very apparent limitations and thus yield only a partial account of consumer channel choice. The cognitive psychologist would undoubtedly have to seek recourse to internal hypothetical constructs, albeit perhaps correlated with observable metrics of actual choice outcomes, and would typically explain environmental influence purely in terms of informational inputs to be processed. Similarly, although directing the focus of attention beyond the individual and toward more "impartial" external determinants of channel usage, the environmental psychologist would typically apply either wholly objectivist conceptual frameworks with which to explain that degree of environmental determination, thereby reducing consumers merely to the level of passive automata in much the same way methodological behaviourists such as Watson would, or else seek to draw upon more subjectivist and/or transactional models which over-complicate the process of explanation by accommodating an unnecessary and complicating introspective-cognitive dimension within an otherwise scientific mode of inquiry. Neither approach would be entirely satisfactory and neither approach would be likely to succeed in explaining the precise mechanism via which the individual consumer interacts with her retail environment. Therefore, on this basis alone, the radical behaviourist standpoint can be deemed to have an important contribution to make to the study of multichannel consumer behaviour in that it *does* offer a mechanism via which the person-environment interaction may be conceptualised – the mechanism that is operant learning.

This is not to say that the radical behaviourist standpoint represents a panacea for consumer research. The BPM framework, at least as implemented in the present study, has potential limitations in its explanatory power also, not least in respect of the information it does *not* direct research attention toward.

By way of illustration, consider two particularly prominent, but related, examples from the analysis of the multichannel cohort documented in Chapters Three and Four concerning the increasing interdependency observed between the two remote purchase channels over the duration of the tracking period. At the study outset, the host retailer revealed that it was formulating a strategy to gradually phase out the traditional print catalogue due to the high costs

involved in producing and implementing that marketing channel, some progress being made toward conversion of catalogue customers to the more cost-effective medium of the Internet being evident in channel purchasing data, a proportional decline in purchasing via the catalogue's telephone sales facility being evident and accompanied by a corresponding increase in electronic purchasing. Early in the tracking period, it became quickly apparent that elimination of the catalogue-based option from the channel portfolio would be a major strategic error for what the retailer's channel usage statistics had not revealed was the extent to which consumers who are recent adopters of Internet shopping services rely upon the traditional print catalogue in order to actually use the new medium. Specifically, in the initial stages of adoption, the majority of consumers in the sample were observed to select goods manually via the *Next Directory* and then to proceed to order those goods electronically via the retailer's Web site. There is no online *shopping* evident, just *ordering* of products, and a number of consumers revealed that they had "bookmarked" the online order page for this purpose, never actually visiting any other section of the *Next* Web site at all. The message from the diaries was therefore clear: if the retailer removed the traditional print catalogue from its channel portfolio, many fledgling "e-consumers" would have neither the ability nor the inclination to procure goods electronically until some degree of familiarity with the medium had been obtained – a potentially disastrous strategic error waiting to happen.

Following on from the above, a high degree of combinatory channel activity also became evident from examination of the narrative content of the consumer diaries, an effect that appeared to span all available retail formats. As was discussed at the thesis outset, and more recently within the context of the channel descriptors presented at the close of the previous chapter, it has long been recognised that consumers now almost routinely combine retail formats in the course of a single shopping situation and, to some extent, an aspect of the logic underlying inclusion of a narrative element of the data collection strategy was to seek to identify such multichannel activities which would not otherwise be readily amenable to quantification within the BPM frame of reference. What was striking about the qualitative engagement with the diaries, however, was not only the extent to which consumers now engage in such practices, but also the time period the said practices now frequently span. With regard to channel combinations, it is not simply a case of consumers, say, researching a product online prior to a physical store purchase, or else sampling a product in a physical store prior to an electronic purchase, these acts of combinatory channel activity can in fact span considerable periods of time, in more than one case consumers being observed to record initial remote research for a product in one monthly shopping diary and the actual store-based purchase of that product in a subsequent diary.

Timeframes such as these do not readily lend themselves to easy detection within the constraints imposed by an orthodox applied behaviour analysis, the rationale underpinning that

methodological strategy being better suited to the measurement and description of more immediate aspects of the consumption process, such as the relationship between setting-level variables and performance of the purchase response, or variations in the actual rate-of-response over time via cruder metrics such as frequency of purchasing.

It could be argued, of course, that the failure to detect such effects is attributable to a weakness in the methodological strategy employed and, at least to a certain extent, there may be a degree of truth in such an argument. Within a research programme of this scale, and involving a relatively modest population size, it was not possible to investigate every single tenet of radical behaviourism within a single design. The study did not, for instance, afford considerable attention to the role of verbal behaviour, other than by reference to its reinforcing properties in discussion of aspects of the shopping activity such as its social dimension, nor did it seek to employ more rigorous and time-consuming techniques such as protocol analysis in order to explore rule-governed behaviour beyond its habitual manifestations. Some degree of compromise was inevitable and the investigation thus focused primarily upon the core elements of the BPM framework itself and sought to develop metrics of those components as the primary aspect of the research design. That said, however, it may simply be that the way in which both the three-term contingency and its BPM rendering are constructed and presented has a tendency to encourage focus upon reinforcement, discriminatory stimuli and the individual learning history, along with the primacy of the rate-of-response as a metric of the Law of Effect in action almost at the exclusion of all else.

Yet, the fact remains that the issue of protracted situational timeframes has *always* presented problems for radical behaviourism (Baum, 2002). In seeking to focus attention upon the situational context and the transactional relationship between person and environment, behaviourism has displayed a marked tendency toward fragmentation of situations into component behaviours. Thus, if a consumer consults a catalogue on Monday in search of new shoes, explores the Internet on Thursday in an attempt to compare and contrast the prices of available choice options, and then finally purchases a pair of shoes in a retail store on Saturday, behaviourism would tend to view this as three separate shopping situations – the first two culminating in no act of purchase, the latter one involving an act of purchase as a behavioural response. The reality, of course, is that the consumer would probably perceive this as but a single "shoe-oriented" shopping situation, but radical behaviourism could not easily accommodate such a perception as it may require recourse to mentalism.

In terms of the long-term viability of the BPM as a consumer research framework, this tendency toward micro-analysis may well constitute a not insubstantial limitation. As more and more novel forms of purchase channel emerge and consumers become more skilled and strategic in their usage, it appears highly likely that protracted shopping situations such as those described above

may become increasingly prominent; situations that are clearly beyond the range of explanatory convenience embodied within the micro-analytical and episodic "brand" of behaviourism at the heart of the BPM. Satisfactory resolution of this limitation must be afforded a high priority if the behavioural approach to consumer psychology is to make substantive advances and, indeed, in respect of both conceptual and empirical extension of this thesis, the protracted shopping situation represents the primary and most pressing direction for future research. With regard to the precise form such a proposed extension may take, two alternative conceptual possibilities immediately present themselves here – the first involving a partial retreat from behaviourism, the latter a substantial enrichment of it.

The first, and perhaps simplest, direction the operant perspective on consumer choice could take would be to attempt to consolidate radical behaviourist frameworks such as the BPM within a more pragmatic and eclectic model that does not preclude alternative paradigms but, rather, seeks to reconcile them in the interests of explanatory and predictive clarity. Throughout this thesis, it has been consistently emphasised that the adoption of radical behaviourism does not *de facto* imply that alternative theoretical paradigms should regarded as contradictory; rather, the stance adopted here has simply been that application of differing explanatory positions holds a capacity to reveal new insights into apparently familiar phenomena, leading to an enrichment of academic knowledge through conceptual and methodological pluralism. Thus, a way forward might be to seek to accommodate both the cognitivist and behaviourist perspectives on consumer choice via an extension of cognitive-social learning theory, a form of neo-behaviourism that recognised that the fundamental distinction between the laboratory rat in an operant chamber and the retail consumer in an apparel store was that the latter was endowed with a capacity to *reflect* upon the reinforcing consequences of her actions and respond accordingly (Bandura, 1986, 1995). Such an approach would not only retain the explanatory power of the cognitive paradigm in respect of the pre-behavioural and post-behavioural aspects of consumption, and thereby accommodate more protracted shopping situations such as those discussed above by reference to constructs such as memory and cumulative knowledge, it would also represent a viable way of retaining the powerful operant dimension identified within the present study and its demonstrable capacity to explain both the nature of the consumer-environment interaction and the adaptive character of that interaction over time.

Of course, the central tenet of behaviourism is that a science of behaviour is possible purely on the basis of observable events and without recourse to mentalism of the form a return to the cognitive-social learning paradigm would necessarily entail. Given that this thesis has repeatedly argued against this recourse to mentalism, regarded here as merely an unnecessary complication, advocating instead a pursuit of the intellectual enrichment and methodological advancement that invariably follows where competing theoretical paradigms are brought to bear upon a subject-

matter and academic conflict ensues, the preference here would clearly be for a continuation of the behaviourist project and research directed toward resolution of the protracted situation conundrum via operant means. With this preference in mind, one alternative – though potentially more challenging – direction operant consumer research might take would be to reappraise the form of behaviourism embodied within the BPM explanatory framework. Radical behaviourism is, after all, by no means the only "brand" of behaviourism that may be drawn upon in order to construct an operant account of consumer choice processes and it may well be the case that the solution to the problem of the protracted shopping situation in fact lies elsewhere within the behaviourist paradigm itself.

A particularly promising starting point for such an endeavour may lie in the work of Rachlin (1994), who has proposed a substantial revision of radical behaviourist theory that circumvents the limitations imposed by the micro level of analysis in favour of a more temporally expansive conceptual position. Specifically, Rachlin's *molar behaviourism* shares the radical behaviourist view of the importance of the learning history as a repository of prior behaviours and their reinforcing outcomes brought to bear upon the current situation, but then extends that concept by recognising that behavioural situations in themselves are frequently composed of an *aggregate* of momentary happenings that may be linked over time.

To illustrate this concept, Baum (2004) cites the example of a young couple who are in love. Aaron loves Marcia passionately and this behaviour can be inferred by observers on the basis of a series of objectively verifiable acts; e.g. Aaron buys Marcia flowers, takes her out most evenings, calls her as often as possible in the intervening periods, thinks about her at work each day during every spare moment, dreams of her beauty each night, and so on.

Interpreted from an orthodox radical behaviourist standpoint, Aaron loving Marcia is merely an explanatory fiction imposed upon Aaron's actions by observers. Buying flowers, calling Marcia, taking her out to dinner, etc., are all individual acts of behaviour that Aaron is engaging in, repeatedly reinforced from situation to situation by Marcia's reciprocal actions. There is no ghostly "thing" called love inside Aaron directing these actions; they are just a series of situationally-specific behaviours that are being positively reinforced. As Baum observes, however, the unfortunate implication here is that Aaron does not love Marcia during the periods when he is not taking her out, buying her flowers, and so on – a proposition that clearly seems absurd.

According to Rachlin, the limitations inherent in radical behaviourism can be overcome if a less molecular view of behaviour is adopted. Thus, in molar behaviourism, Aaron loving Marcia is re-conceptualised as a single behaviour that is extending over time, a behaviour that is in itself composed of a series of interconnected episodes in which Aaron performs particular behavioural

units, termed actions (buying flowers, calling Marcia). These actions may themselves be reinforced, but they are nevertheless still merely components of Aaron's loving behaviour in much the same way as the various muscle and joint movements that a rat in an operant chamber performs are components of the lever-pressing behaviour that delivers food; each movement may be reinforced as the rat, say, gets closer to the lever or avoids a shock, but the most salient reinforcement will occur when the lever-pressing behaviour itself is completed and a food reward is delivered.

Seen from a molar perspective, the hypothetical example of a consumer buying shoes can similarly be regarded as an aggregate behaviour composed of a series of interconnected (i.e. molecular) acts. Consulting the catalogue on Monday and the Internet on Thursday are but components of a broader shoe-buying behaviour, as indeed is performance of the act of purchase itself on the Saturday. Each act may in turn also be subject to reinforcement, such as where the catalogue alerts the consumer to various styles of shoe available, or where the Internet proves useful in locating the best price, but the most important and salient level of reinforcement will be that derived from the overall shoe-buying process itself and its resultant consumption outcomes, all of which may be interpreted as but aspects of a single behaviour being performed for the duration of a protracted retail shopping situation.

This concept of a molar behaviour represents a substantial yet under-researched extension of behaviourist theory that, despite its disparate nature, does not seek recourse to mentalism. In this "New Behaviourism" (Baum, 2002), Rachlin is not suggesting that the consumer is engaging in some form of computational search-locate-evaluate-purchase process as a cognitive psychologist would no doubt contend; rather, he is indicating that actions such as looking at shoes in a catalogue, comparing prices about shoes on the Internet, and thinking about shoes or talking about them with friends, are all components of a single shoe-buying behaviour that is being performed over time, the frequency with which such actions may be independently observed constituting a quantitative predictor of the impending final act of purchase and the likely saliency and form of its reinforcing outcomes.

Within the context of the present thesis, then, molar behaviourism represents one potential conceptual and empirical strategy that may be employed in extending the current research in order to accommodate and develop a more parsimonious account of the protracted multichannel shopping situation. At present, if re-conceptualised in Rachlin's terms, the content-analytical data effectively represent only a molecular-level coding of *component actions of a behaviour* and their *immediate reinforcing consequences*, rather than the *aggregated behaviour* itself. However, if a more molar-level coding rationale was developed, it would theoretically be possible to engage in a content analysis of this *aggregated behaviour*, together with its overall *matrix of reinforcement outcomes*, thus

yielding insight into the nature of the protracted shopping situation and the particular combinatory patterns of channel usage associated with it.

In sum, despite the aforementioned methodological limitations of the study and the as yet unresolved complication of temporal protraction, it may nevertheless be argued that the present thesis has, albeit with some qualification, achieved in satisfying its three key objectives and, in the process, offered a potentially valuable contribution to academic understanding of the emergent phenomenon that is multichannel consumer behaviour. In respect of the first research objective, application of the methodological strategy of applied behaviour analysis has generated a viable account of the consumer channel selection process and its operant character, systematic investigation of the core elements of the BPM explanatory framework shedding light upon the extent to which channel choice is a function of a situational-level interaction between person and environment, the pursuit of a positively reinforcing shopping outcome being directed toward selection of the particular channel deemed to be the most likely delivery mechanism for that reinforcement as determined by the application of an individual learning history upon the current retail behaviour setting and its salient variables. Secondly, in terms of the evolutionary nature of consumer behaviour at the physical-virtual interface, the concept of the learning history and the verifying data presented in respect of its operation during the course of the consumer tracking period strongly supports the contention that the consumer use of multiple retail channels is an iterative learning process, changes in the rate-of-response toward each purchase channel in light of previous experience of that channel, together with the formation of habitual responses toward particular channels and the observed variations evident in the behaviour setting variables serving as discriminatory stimuli, all suggesting that this is an ongoing process of operant adaptation to a changing retail environment that is inherently phenotypic in character. Finally, and perhaps most significantly of all, extension of the sphere of application of the BPM to non-store shopping situations, and to acts of purchase mediated via both physical and electronic means, has not only demonstrated that this is a flexible and comprehensive explanatory framework, capable of yielding an account of consumer channel choice as readily as it can of store, product or brand choice, it has also raised important gaps in understanding in respect of particular aspects of consumer behaviour in retail environments, such as the problem of the temporally protracted shopping situation, that radical behaviourist approaches to consumer research must urgently seek to address – gaps that this thesis would conclude may best be addressed by means of the instigation of a programme of research to explore revision of the behavioural perspective model by reference to the potentially more parsimonious and insightful molar behaviourism advocated by Rachlin.

On the Behaviour of the Multichannel Firm

In summary, this thesis began by noting the increasing significance of the Internet as a retail marketing channel and observed the growth of the multichannel business model as the dominant implementation of that channel, innovative retail organisations in the pursuit of competitive advantage seeking to satisfy consumer wants, needs and desires more effectively and efficiently than market competitors via a synergistic management of both physical and electronic retail formats as multiple routes to purchase. It was suggested from the outset that successful realisation of a multichannel retailing strategy requires careful management of all customer entry points, early unsatisfactory experiences of an emergent channel holding a capacity to damage overall brand equity merely by association. Indeed, many of the problems reported in the literature with regard to implementation of a fledgling multichannel strategy directly relate to a failure to deliver to the consumer a truly integrative and efficient portfolio of purchase channel options, management of potential channel conflicts being typically afforded a higher priority than management of the consumer shopping experience.

Given that successful marketing can only ever begin with an understanding of how and why customers behave as they do, this thesis has sought to construct a viable and comprehensive account of consumer channel choice that is grounded in radical behaviourism, a paradigm that begins from the premise that psychology is a science of behaviour, and that that science should direct its attention toward the analysis, prediction, control and explanation of directly observable acts of behaviour only, without recourse to mentalism, introspection and hypothetico-deductive inference. Thus, within the context of the present thesis, consumer psychology is similarly regarded as scientific endeavour founded upon pragmatic-positivist principles – a psychology that defines marketing not as a business function concerned with the strategic management of product, price, promotion and place (the ubiquitous "4P's"), nor as an organisation-wide quasi-evangelical philosophy oriented toward customer satisfaction and value delivery, but as a series of activities engaged in by a firm in order to predict and control consumer behaviour.

Drawing upon the behavioural perspective model as an interpretive device, and via a longitudinal application of a systematic programme of applied behaviour analysis, the thesis has presented an account of consumer channel choice that, albeit with some qualification, broadly conforms to a stimulus-organism-response view of behaviour and the central tenets of the Skinnerian three-term contingency. Specifically, it is an account of the channel choice process that regards consumer selection of a particular retail format as the preferred mode of purchase as being a function of a situation-level operation of an idiosyncratic learning history of previous consumption experiences and their outcomes upon a behaviour setting and its constituent

environmental variables, the goal being to identify reliable discriminatory stimuli that will signal the likely reinforcing consequences of available choice options; a process ultimately directed toward maximisation of positive reinforcement and/or minimisation of aversive consequences. In short, a channel is selected on the basis of its likelihood of delivering consumer satisfaction under the circumstances prevailing in the current retail shopping situation.

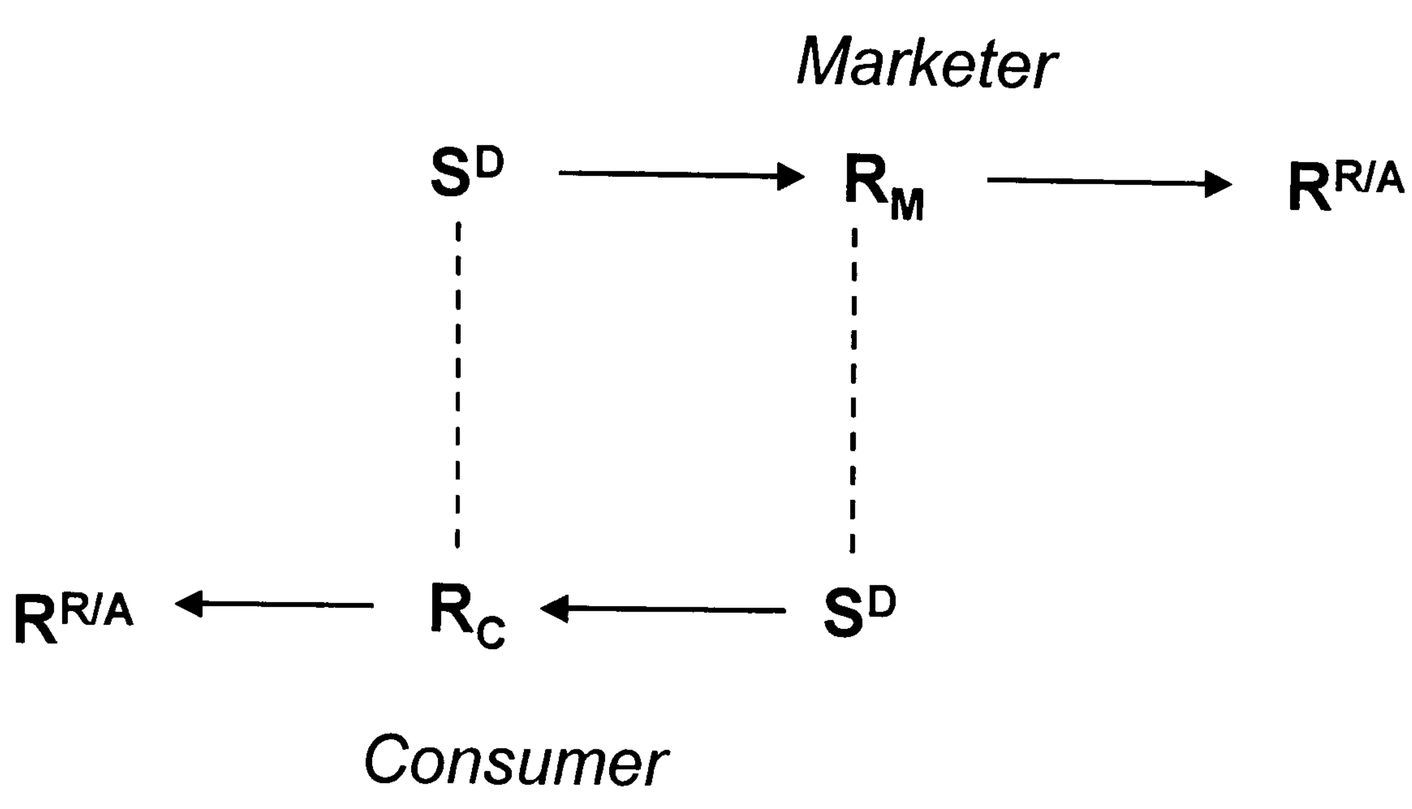
Viewed from this standpoint, the potential of the BPM explanatory framework and its accompanying methodological strategy of applied behaviour analysis as a retail marketing tool quickly becomes apparent. In the preceding account of purchase channel selection, for instance, the observation that particular retail formats are associated with particular patterns of reinforcing outcomes, and that these outcomes in turn translate into a degree of channel specificity in respect of those formats favoured for specific operant classes of shopping activities, yields significant opportunities for further research in this area in terms of both the optimal mix of products and services offered to the market via specific purchase channels and the identification of those consumer segments within that market most likely to adopt and utilise emergent and innovative retail formats. In a similar vein, now that operant learning appears a viable mechanism via which to understand and explain the complex interaction between the retail consumer and the environmental context within which (s)he consumes, further operant investigation of both the setting variables most salient in directing a consumer toward a particular purchase channel, and of the adaptive nature of changes in consumer channel usage over time, affords an opportunity to more effectively and strategically manage the marketing mix of each channel and to better anticipate and predict the behaviour of multichannel consumers in the longer-term.

Each element of the BPM, together with their combinatory action, presents a series of research opportunities for both marketing academic and practitioner alike to seek to gain insight into the consumer responses to the products, services and channels of everyday life, and to the marketing of those products, services and channels. Moreover, given that the purpose of retail marketing is to predict and control buyer behaviour, and that those predicting and controlling activities are in themselves acts of behaviour upon the part of the firm in their own right, adoption of a behavioural perspective also affords a potential to better understand the nature of the marketing management process itself.

As Foxall (1998a) astutely observes, firms exist in order to market their goods and services, a process that is inherently behavioural in character and embodied in the bilaterally-contingent relationship with the firm's customers depicted in **Figure 19** below. As has been repeatedly stated throughout this thesis, discriminatory stimuli within the retail behaviour setting (S^D), subject to their interaction with an individual's unique learning history of encounters with identical/similar behaviour settings in the past, serve as signals that shape the consumer's response (R_C) to a product, service or channel, and that response duly delivers positively or

aversively reinforcing consequences ($R^{R/A}$); an operant process that is concurrent with the classic Skinnerian three-term contingency.

Figure 19: The Bilateral Relationship between Marketer and Customer (Foxall, 1998a)



At the same time, however, the marketing activities of the firm also constitute operant behaviours in themselves; behaviours which equally conform to the three-term contingency in a manner that is contingent upon the behavioural responses of the firm's customers. Put another way, the behaviour of customers in the marketplace forms part of the competitive environment (i.e. the behaviour setting) within which the firm operates, and thus constitutes a form of discriminatory stimulus (S^D). Depending upon those customer responses, the firm will engage in a series of marketing activities (R_M) that will in turn be either positively or negatively reinforced by subsequent customer responses to those marketing activities ($R^{R/A}$). As illustrated by the two broken lines in **Figure 19**, the behaviours of both marketer and customer are thus interdependent; i.e. bilaterally contingent upon one another. Customer behaviour is a component of the firm's behaviour setting, marketing activities being reciprocal behaviours that are directed toward influencing the behaviour setting of the customer in order to seek to elicit the behavioural response that is the customer's purchase of that firm's goods/services via its retail marketing channel(s). In other words, *marketing is an operant process* too.

Seen in this light, the true nature of the marketer-customer relationship becomes clear, together with the implications of that relationship for strategic marketing management. The goal of the retail organisation is to predict and control the behaviour of its customers in such a manner that the firm maximises positive reinforcement and/or minimises the aversive consequences of its market activities, as measured by the extent to which consumers acquire and use, consume and

dispose of, the firm's market offerings. Effective marketing management is, therefore, a molar-level behaviour the firm engages in as a strategy for rendering the behavioural responses of its customers amenable to contingent control, the molecular marketing activities within that economic behaviour typically being directed toward increasing the likelihood of a buying response through closure of the consumer's retail behaviour setting, careful management of available discriminatory stimuli (i.e. the marketing mix) and, ultimately, the maximisation of the positive reinforcers provided to consumers with the minimal aversive consequences for the marketing firm itself.

In conclusion, as has been demonstrated by the empirical work documented in this thesis, a well-designed and implemented retail purchase channel can be an effective tool in the marketing management process, particularly where that channel is but one of several within the firm's multi-format channel portfolio, each individual channel capable of facilitating delivery of qualitatively different positively-reinforcing benefits to the consumer. Such a strategy can, however, only ever deliver competitive advantage to the firm if its own marketing behaviours are directed toward a customer-centric management of the consumer buying experience – an inherently operant process in which more sophisticated analytical frameworks derived from behaviourism may yet come to serve as not insignificant strategic management tools.

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